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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY  
Mitchell Bros. Company.  
(INCORPORATED.)

Vol. II.

CHICAGO, ILLINOIS, JULY 15, 1883.

No. 1.

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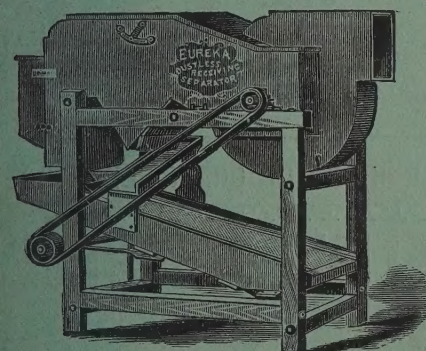
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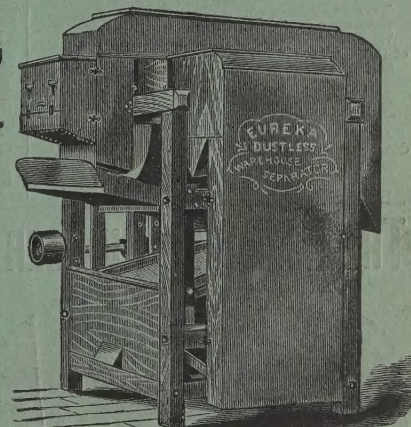
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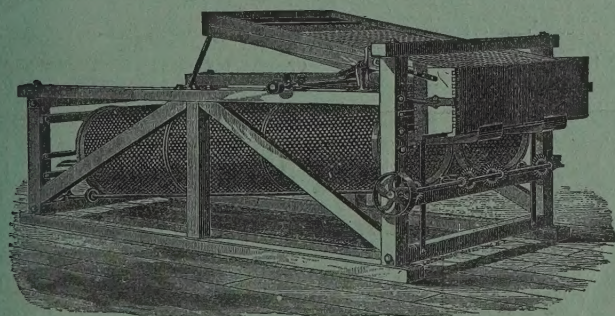
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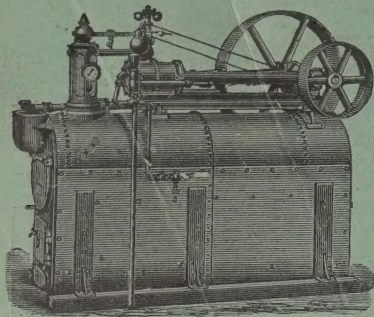
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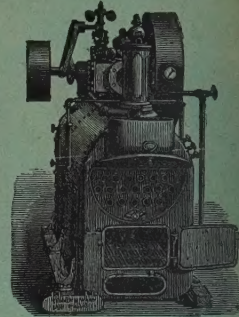


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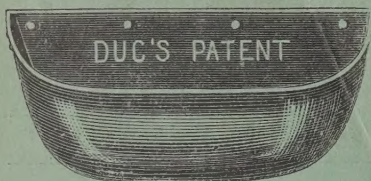
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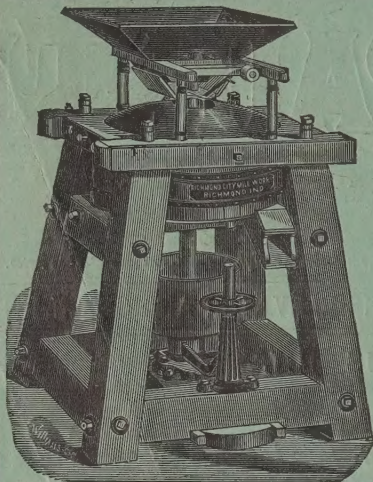
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Will outwear **half a dozen** of any other bucket in the market.  
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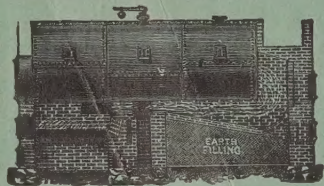
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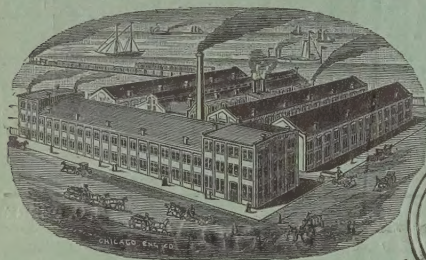
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**THE CUMMER ENGINE CO.,** Cleveland, O.

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**SIMPLE, CHEAP, STRONG AND DURABLE.**



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Patented June 13, 1882.

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THE LOTZ PATENT

## GRAIN SHOVELING MACHINE,

FOR UNLOADING CARS.

PAT. NOVEMBER 23, 1880, AND DECEMBER 14, 1880.

This machine works automatic. The hoist rope spool of each machine is driven from a line shafting by paper friction wheels, and all the mechanical movements in the machine are such that they will not wear, nor get out of order. A GREAT SAVING IN REPAIRS OF SCOOPS, in the WEARING OF ROPES, in LUBRICATING MATERIAL, and in REPAIRS ON MACHINE. The resistance on taking the scoop back into the car is much less than with other automatic machines. The length of pull of hoist rope can be instantly adjusted. The more economical operation of this machine as compared with others will pay its first cost in five years.

Eleven double machines of above construction have been set up and are in practical operation in Rock Island Elevator A, near Twelfth Street Bridge, Chicago, Ill.

MR. WM. LOTZ, CHICAGO: Office of FLINT, ODELL & CO., 151 Monroe St., Chicago, May 4, 1883.

DEAR SIR—We have been using your Patent Shovel Machines in Rock Island Elevator A for several months, and are well satisfied with them. We estimate a saving of 50 per cent. on shovels, 75 per cent. on rope and 60 per cent. on all over the Shovels previously used by us. Yours truly, FLINT, ODELL & CO.

For further information address

**HOWARD IRON WORKS,** Buffalo, N. Y.,

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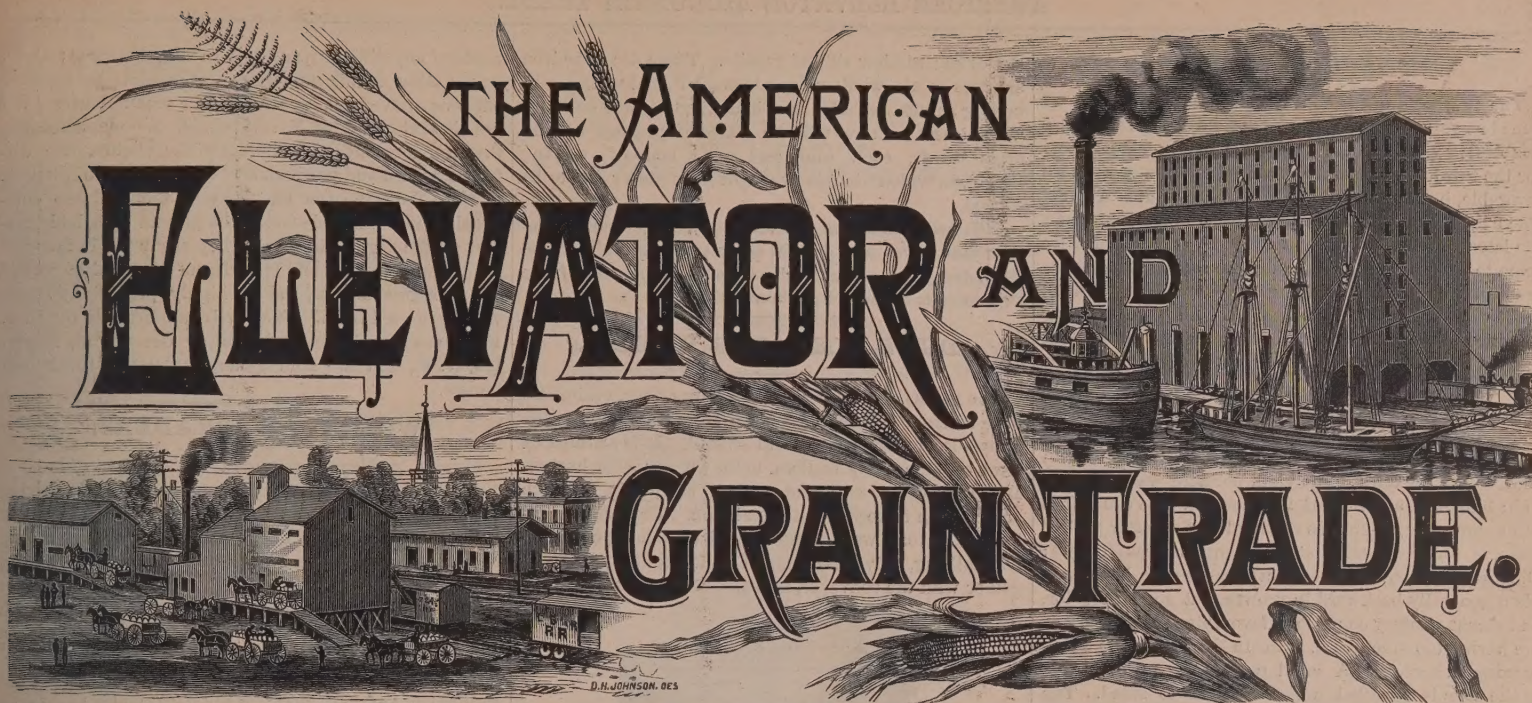


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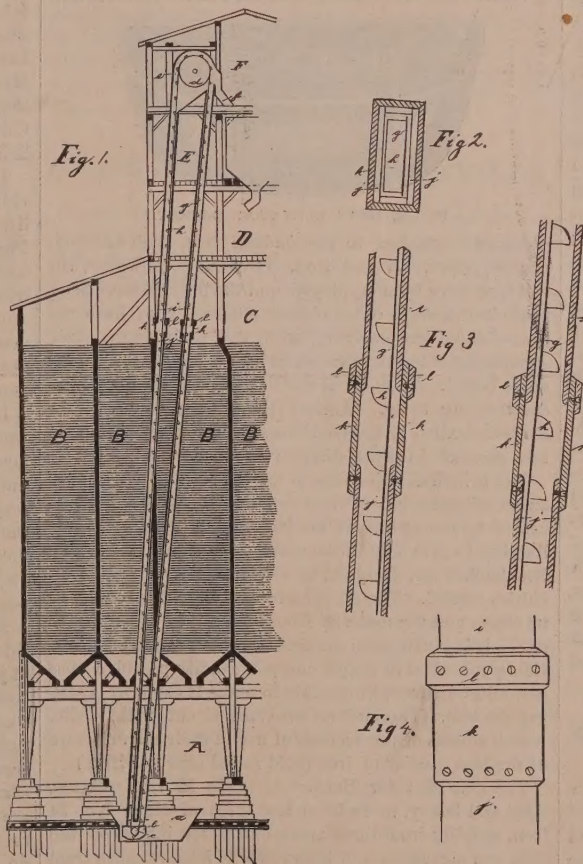
## ELEVATOR LEGS IN GRAIN HOUSES.

The legs of a grain elevator are its essential working parts, and have given their name, "elevator," to the whole structure. These legs extend from the boots in the basement or cellar of a grain house to the uppermost floor of the cupola, and generally consist of rectangular tubes, inside of which the bucket-belts are moving. Such legs are generally framed of boards two inches thick, and are frequently of a length of 135 feet each, and while they are secured with their bottom ends to the boot of the elevator that sets in a tank between the foundation piers of the building, the upper extremities of these legs are connected with the box that incases the upper elevator pulley and carries the delivery spout, and is called the "elevator head." The buildings, inside of which these elevator legs are located in a vertical or slightly inclined position, have to be very strong structures placed upon heavy foundations to make them sustain the tremendous weight of the grain stored therein, and the bins, which occupy generally about sixty feet of the entire height of such a building, for the purpose of making them equal to the side pressure of the grain, are generally built of planks spiked flatwise one on top of the other, so as to form solid walls about from four to eight inches thick. These buildings, when first filled with grain, will not only settle until all the frame joints have come to a solid bearing, but all horizontal tiers of timber will shrink to some extent, and the boards that form the bin walls will shrink together considerably during the first year after the building is erected, and so as to reduce the entire height of the bins from nine inches to one foot, and sometimes more. Now, while the grain house will thus shrink in height, the elevator legs will not, and in consequence allowance has to be made for these legs to remain intact and maintain their position while the building will settle, which was heretofore accomplished by sustaining these legs in the structure between timbers forming slip joints, and after the building had settled as much as could be expected, the elevator legs had to be cut and the elevator heads lowered proportionally, all of which has been a considerable expense and a tedious job to perform in a good workmanlike manner.

We illustrate on this page a device or plan of construction which has for its object the overcoming of these difficulties, this plan being to allow the elevator legs to shorten as the building settles. It is the invention of Mr. ELIAS ROBERTS of Chicago, and is secured to him by letters patent dated April 11, 1882.

In the accompanying drawings, Fig. 1 represents a

partial vertical transverse section of a grain house and of one of the elevators therein; Fig. 2, a sectional plan; Fig. 3, a vertical section, and Fig. 4 an end elevation of that portion of the elevator legs having my improvements. Like letters represent corresponding parts in all



AN IMPROVEMENT IN ELEVATOR LEGS,

the figures. A denotes the lower floor of a grain house; B, the grain storage bins, and C D E the three stories of the cupola in which the weighing and spouting of the grain is performed, and F the uppermost floor of the cupola, that contains the machinery for hoisting the grain. A tank, a, for each elevator is located between two foundation piers, and into this is placed the elevator boot b, inside of which the lower elevator pulley, c, is pivoted. The upper elevator pulley, d, on the top floor of the cupola, is incased by the elevator head, d, having delivery

spout f. The elevator belt g, carrying buckets h, is stretched over pulleys c and d, and is protected and guided in the elevator legs i and j, each consisting of a long tubular box, rectangular in cross-section. These legs extend from the boot b to the elevator head e, and were made continuous heretofore.

Just above the bins B, each leg is separated in an upper section, i, and a lower section, j, with a space between, twenty to twenty-two inches. These leg sections i and j, are connected by a box, k, the inside dimensions of which are equal to the outside dimensions of the elevator leg. This box, k, is rigidly connected with the sections j by wood screws, and the opposite end of the box k, which surrounds the end of a leg, i, but is not made rigid therewith, is reinforced by a frame, l. The connection thus made will hold the two leg sections i and j in line with each other, and will form a telescoping joint, which will allow these sections to approach each other proportionally as the building is settling.

With this improvement the inventor claims that he can secure the sections i of each elevator leg rigid to the floors in the several stories of the cupola, while in the bins, where the principal shrinkage takes place, he sustains the sections j between cross timbers that are loosely jointed with the legs, and thus he saves the trouble and expense of watching, cutting down and overhauling the several elevator legs in a grain warehouse during and after the period of its settling is taking place. The inventor applies this device of telescoping connections to all spouts that are carried more or less vertically through the bins for transferring and shipping grain. Parties who are interested in this matter can obtain particulars which may be desired by addressing MESSRS. BAUMANN & LOTZ, Rooms 57 and 59 Metropolitan Block, Chicago.

## SPEED OF ELEVATOR BELTS.

The Webster & Comstock Manufacturing Company, of Chicago, says that one difficulty which elevator men often encounter is the imperfect discharge of grain over the head pulley. It says that the following is about the correct speed which elevator belts should run over a given sized pulley in order to get a free and perfect discharge:

Speed of Belt.	Size of Pulley.
200 to 250 feet per minute.	24-inch
300 to 350 " "	36 inch
400 to 450 " "	48-inch
500 to 550 " "	60-inch
600 to 650 " "	72-inch

Or about 35 to 40 revolutions per minute of any sized pulley.



## THE CORN CROP.

The prospects of the corn crop in the latter part of June last year, owing to an unfavorable start, were very doubtful; replanting had been required in some spots for the third time. As July advanced matters grew more favorable, but rapid growth did not occur until August. The exceptionally favorable conditions that month, and the lateness of severe frosts produced a crop claimed by some to have been proportionally the largest ever gathered in this country. There were some suggestions made this season as to the probable defect of germinating qualities in the seed planted, but the results show them to have been incorrect. The census office returns for 1879 reported the corn crop at 1,754,861,535 bushels, with an acreage of 53,085,450, or a yield per acre of 29.1 bushels. For the following three years the acreage was as follows: In 1880, 62,317,842; 1881, 64,262,625; and in 1882, 65,569,546 acres. The yield per acre was, in 1880, 27.5; 1881, 48.6, and in 1882, 24.6 bushels. The conditions of the present corn crop as reported in the latter part of June, is for the twelve states mentioned as follows: Ohio has a moderate increase of acreage over last year; plant generally backward in growth, but good in color, and recent weather conditions favorable, some sections are having too much rain. In Indiana there is some increase in acreage. A small portion, in the lowlands of the state is reported unfavorably as to stand. The plant is backward, but the outlook is generally favorable. There has been a considerable increase of acreage in Illinois, and the stand is almost uniformly good. Late rains have hindered cultivation over a large breadth, and the plant is backward, so that the general condition of the corn crop is only fair. Iowa has an increased acreage of from five to ten per cent, and the stand is generally good. Rain has been very extensively a drawback, but this, under present conditions, if continued, promises to be soon overcome. In Missouri, in the larger portion of the state the stand is good, while in some sections it falls below the standard; excessive rains here also present their disadvantages. Kansas has a large increase of acreage, and the conditions and prospects are encouraging. The same report comes from Nebraska as to average, but the growth is backward, and the stand only fair. In Minnesota the acreage averages a small increase; stand and condition generally only fair, growth backward, but now progressing rapidly. In Wisconsin there is perhaps a small decrease of acreage; the season is backward; prospects only fair. There is in Michigan from ten to fifteen per cent. decrease of corn acreage; stand and condition in large portions poor and not promising, while in many others there has recently been rapid improvement. In Kentucky the acreage is about the same, or a little increased; condition mainly good, and, though backward, the crop promises an average result. Tennessee has no change in acreage, and, with few exceptions, the sections report a good stand and fine promise. These twelve states produced nearly 1,200,000,000 bushels of the last year's corn crop of a little over 1,600,000,000 bushels, or 73.5 per cent. and their acreage in corn is considerably increased over last year. Of old corn now on hand in these states inquiries have led to an estimated general average of seventy per cent. of fair to good supplies. The general situation of the corn crop is fair, comparing favorably with previous years, and points to an increased production. A few days of fine weather would soon overcome the backward growth of the crop over the large portions of country that have suffered recently from excessive rains.

## WAREHOUSES IN THE BROOKLYN BRIDGE.

The stone arches of the Brooklyn Bridge are to be converted into twenty-nine fire-proof warehouses, eleven of which are to have three stories, nine two stories, and nine one story each, making in all sixty stories. The depth of twelve of these houses will be about ninety-three feet, and that of the others about seventy-seven feet.

The construction is described by the *Commercial Bulletin* as follows:

The floors are to be of Georgia pine, laid in a concrete surface over brick arches turned between rolled iron beams, which will be supported by riveted steel girders with openings in each floor for elevator and stairs. There will be iron steps, with suitable vault lighting and ventilation at all fronts facing toward Frankfort and Dover streets. The architecture of the warehouses will be plain. The fronts will be built of brick, with base course, bond

stones and window sills of granite. There are to be iron shutters at all window openings and steel spring self-coiling shutters at all doors, including the side doors in cross streets. There will be sixteen openings on the cross streets, each nine feet wide and of varying height, in which double wrought iron doors are to be placed.

This will afford an immense storage capacity, the floor area being over 100,000 square feet, and almost entirely free from ordinary fire hazards. The cost of the structures is estimated at about \$350,000.

## DUC'S ELEVATOR BUCKET.

The means and methods of handling flour, grain, etc., have reached a state of perfection in this country unknown in the lands of the Old World. It is claimed by some that the use of endless belts with cups or buckets attached was known to the ancient Egyptians, but such claims seem to be without foundation. The elevator in its present form was invented by that pioneer of American milling, Oliver Evans, and introduced by him, together with the conveyor, into his brother's mill in the

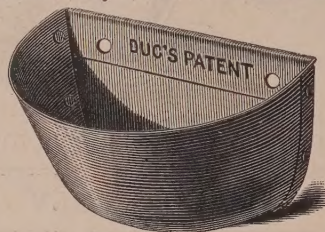


FIG. 1, DUC'S ELEVATOR BUCKET.

year 1783. It is estimated that these two inventions have effected a saving of 50 per cent. in the necessary labor in a mill, and the adoption of so useful a device soon became universal.

Various substances have been used in the construction

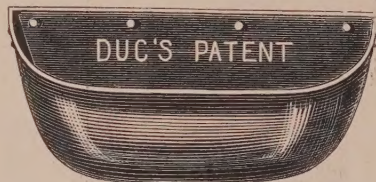


FIG. 2, DUC'S ELEVATOR BUCKET.

of buckets attached to the endless belt, such as wood, leather, paper, tin and iron. Ordinarily, however, tin and iron have been employed, and the buckets have been made in the shape of an oblong square. They have answered their purpose very well, but, as in every other department of industry, constant improvements have been made both in the shape of the buckets and the method of constructing them. Among these improvements are those embodied in the DUC ELEVATOR BUCKET, which we take pleasure in illustrating for our readers.

The principal objections to the old style of bucket are an occasional accident from catching in the elevator leg, caused by the turning of the belt, and, it is claimed, their liability to give way in the seams in a short time. The Duc bucket was designed to obviate both of the difficulties named. The manufacturers claim that, owing to its shape and the material from which it is of necessity made, it is much more durable than the ordinary bucket. Being spherical in shape, one will readily perceive that it would be almost impossible to make it catch by twisting the belt. The buckets are struck out with a die, which admits of the successful use in their manufacture of the best quality of iron (cold rolled charcoal iron.)

The Duc Elevator Bucket is made in two weights, light and heavy, there being ten sizes of light No. 24 iron, ranging from three and a half to ten inches on the belt, and eleven sizes of heavy No. 16 iron, ranging from four and a half inches to sixteen inches. The light bucket is designed for use in flour, drug and spice mills, and by malsters, brewers, and for light work generally. The heavy bucket is designed for mines, sugar houses, plaster works, and other heavy work. Fig. 1 shows the ordinary shape of the bucket. The second of our illustrations represents the shape of the twelve, fourteen and sixteen inch heavy buckets, which are made with straight fronts, and are designed for use in store-houses and for all purposes where a large, staunch bucket is required.

We understand that some 40,000 of the Duc Elevator Buckets have been sold during the first year of their introduction, and as yet the first complaint has not been

made of any difficulty met with in adopting them; while, on the other hand, numerous testimonials as to their efficiency have been received by the manufacturer. We are also informed by Mr. Rowland, the manufacturer, that at five recent industrial exhibitions held at five different points, and particularly at the American Institute, of New York, the Duc buckets were brought into competition with other elevator buckets, and invariably carried off the highest honors. They are in use in many of the prominent mills and factories of the United States and foreign countries, and are highly praised by those who have used them. They are manufactured by Thos. F. ROWLAND, "Continental Works," Greenpoint, Brooklyn, N. Y., and are sold generally by mill-furnishing houses.

## WOMEN AS "TRADERS."

Female gamblers are not a new product of modern civilization. Throughout human history enterprising members of the fair sex have always found occupation in every department of man's work. Brokers have long been familiar with women speculators in stocks or any other ventures of the speculating fraternity. It is a matter of no surprise then that the Chicago Open Board, with its "puts" and "calls," and the "bucket shops" find a fair amount of female patronage. The ubiquitous reporter of the daily press has recently cultivated this field of inquiry, and finds that this type of females has grown in Chicago into a class numbering about 600, both married and single, and representing almost all ranks of society. Working women and prostitutes, however, are rarely found among them. Brokers, as a rule, do not like their indiscriminate patronage. While many of them, as one said, were "excellent women," quiet and business-like in their dealings, they are generally disagreeable customers. When things go wrong they are bitter and loud in their complaints, always charging crookedness and wrong on somebody. Their deals are usually in small sums, seldom for over a thousand bushels of grain, the average margins being about \$10. There are several bucket shops that accommodate them; two are exclusively for ladies, one on LaSalle street; the other is the "Ladies' Trading Parlors," Mrs. Jennie Wilson, manager, rooms 69 and 70 Exchange Building, Chicago. The latter makes its trades on the Call Board. Various brokers have signs up announcing ladies' accommodations for trading on the Open Board.

There is a considerable romance connected with individual cases, often from the most respectable walks of life, in some instances, it is said, the wives of clergymen. The various mishaps of life, sometimes the abuse of trusts and the misappropriation of funds,—at times extravagance that had compelled visits to pawn brokers,—are among the causes leading to these attempts by rapid methods to obtain the means of replacing losses. A few are recognized as regular dealers, with the coolness, experience, and *sang froid* of their masculine compeers.

In general the effect of this business is to change the woman's character. She acquires the language and manners of the men engaged in business, becomes unrefined and unsexed, and receives none of the courtesy or respect that true womanhood instinctively obtains from the coarsest of the male sex. Those brokers who do their business shrink from them with a feeling akin to disgust, and are thankful to hear nothing of the sale board in their own homes.

Mrs. Wilson, of the "Ladies' Trading Parlors," considers this view held by brokers as untrue and the result of jealousy. Her opinion is that women as traders are cooler-headed and more careful than men, and are less likely to be ruined by speculation. They make no more fuss over losses than men do. The business of this concern is usually in lots of from 1,000 to 5,000 bushels; some ladies buy heavier. Nearly all of her customers are married women, and deal under their husbands' directions. Boarding-house keepers and working women do not appear among them, and but few widows. Women of large means trade on the regular board through brokers. Some of her regular customers, Jennie says, make money and become independent. Women so engaged who win do not spend their money in saloons or on fine clothes; they are usually plain and practical. In Mrs. Wilson's opinion, "Women have a perfect right in the market." Yes, a legal right, doubtless; but the voice of home and social influence utters its stern prohibition in unmistakable language.

The best and cheapest Car Starter is sold by Borden, Selleck & Co., Chicago, Ill. With it one man can move a loaded car.



## Late Patents.

Issued on June 12, 1883.

GRAIN CAR DOOR.—Frederick L. Kirkbride, Wyandotte, Kan., assignor of two-thirds to Robt. H. Drennan and Wm. C. Durall, both of Kansas City, Mo. No. 279,255. Filed March 27, 1883. (No model.)

GRAIN SCREEN.—John D. Belton, New Orleans, La., No. 279,215. Filed Oct. 31, 1882. No model.)

Issued on June 19, 1883.

DRIVING CHAIN OR BELT.—Levi H. Goodwin, Cincinnati, O. No. 279,742. Filed March 7, 1883. (No model.)

PULLEY BLOCK.—Thos. R. Ferrall, Boston, Mass. No. 279,553. Filed March 30, 1883. No model.)

PULLEY BLOCK.—Thos. R. Ferrall, Boston, Mass., No. 279,554. Filed Jan. 4, 1883. (No model.)

SHAFT HANGER.—Robt. Whitehill, Milwaukee, Wis. No. 279,624. Filed Oct. 11, 1882. (Model.)

Issued on June 26, 1883.

BELT COUPLING.—Abner Johnston, Cornwall, assignor of two-thirds to Nelson Secor, New York, N. Y. No. 280,186. Filed May 9, 1883. (No model.)

RIDDLE FOR GRAIN SEPARATORS.—Jno. H. Bell, Mount Ephraim, N. J. No. 280,007. Filed March 12, 1883. (No model.)

OILER FOR MACHINERY.—Frederick A. Gardner, Buffalo, N. Y., assignor of one-half to R. Dunbar & Son, same place. No. 280,029. Filed March 30, 1883. (No model.)

DIFFERENTIAL PULLEY BLOCK.—Peter Murray, Jr., Newark, N. J., assignor of one-half to Thos. J. Dennis, same place. No. 280,218. Filed Feb. 16, 1883. (Model.)

GRAIN TALLY.—John E. Fellers, Burlington, Ind. No. 280,163. Filed Feb. 13, 1883. (Model.)

Issued on July 3, 1883.

GRAIN CAR DOOR.—B. Frank Teal, Philadelphia, Pa. No. 280,688. Filed May 11, 1883. (No model.)

DRIVE CHAIN.—Wm. D. Ewart, Chicago, Ill., assignor to the Eward Mfg. Co., same place. No. 280,729. Filed April 27, 1883. (No model.)

BELT PULLEY.—Aurin Wood, Worcester, Mass. No. 280,775. Filed June 6, 1881; renewed June 12, 1883. (No model.)

ROOFING.—Wm. C. Smolstig and Wm. Marsey, Springfield, Mo. No. 280,681. Filed Jan. 9, 1883. (No model.)

WAGON DUMP.—A. K. Ersland, Sheldahl, Iowa. No. 280,592. Filed April 17, 1883. (No model.)

Issued on July 10, 1883.

GRAIN CAR DOOR.—Jairus J. Treat, Detroit, Mich. No. 280,972. Filed Feb. 20, 1883 (no model.)

DRIVE CHAIN.—Adolph Assmus, Chicago, Ill., No. 280,780. Filed Sept. 18, 1882. (No model.)

ELEVATOR BUCKET.—Henry W. Caldwell, Chicago, Ill., No. 280,909. Filed May 10, 1883. (No model.)

FANNING MILL.—Chas. S. Beebe, Racine, Wis., No. 280,897. Filed Dec. 7, 1881. (No model.)

FANNING MILL.—Chas. S. Beebe, Racine, Wis., No. 280,898. Filed May 26, 1883. (No model.)

GRAIN ELEVATOR.—Wm. Watson, Memphis, Tenn., No. 281,214. Filed March 26, 1883. (No model.)

AUTOMATIC GRAIN METER.—Elihu M. Thorpe, Wapella, Ill., No. 281,164. Filed May 21, 1883. (Model.)

WHEAT CLEANER.—Dandridge P. Motley, Rexbury, Va., No. 281,115. Filed March 27, 1883. (No model.)

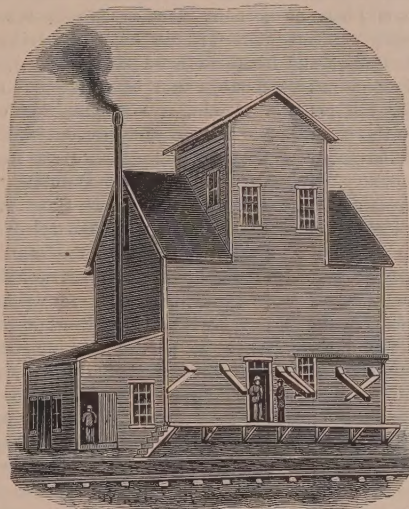
## CROPS ON THE PACIFIC COAST.

The reports from the Pacific Coast are very flattering, in regard to the estimated outcome of the present cereal crop. The acreage of grain cultivation has been very largely increased, especially of wheat, and a large surplus for exportation is anticipated. California has greatly increased her acreage of barley, and the lowest estimate of the crop is 19,000,000 bushels. Authorities, claimed to be reliable in that section, summarize the best reports as follows: California, wheat, 62,000,000 bushels; barley, 19,000,000; oats and corn, 12,000,000; small grains, etc., 4,500,000. Oregon and Washington Territory, wheat, 16,000,000 bushels; oats, barley, etc., 3,000,000. Total, 116,500,000. The product of Nevada and Arizona will, if added, bring up the aggregate cereal

crop of this coast to 120,000,000 bushels. Imports of wheat sacks are large, and generally sold to arrive. The Oakland factory expected to resume manufacture in July, the old stock being all sold.

## A TYPICAL WESTERN ELEVATOR.

The great number of elevators that have been built up throughout the West and Northwest in the last few years indicates the rapidity with which the new agricultural sections of our country have filled up with a farming population. First come the settlers following in the wake of the hunters, trappers, and pioneers, then the railroads, then the elevator and grist mill. We give



in this column an illustration of a Western Grain Warehouse which will serve as a type of hundreds of its class throughout the West and Northwest. The grain elevator of from 25,000 to 100,000 bushels capacity is not usually a picturesque structure, but it is made for use, and has been one of the greatest factors in aid of the rapid settlement of our country.

## GRAIN HANDLING AT LOUISVILLE.

Louisville, the commercial metropolis of Kentucky, is rapidly becoming an important center of the grain trade of the South, her annual transactions in grain amounting to more than \$7,000,000. There is besides that reported by the Board of Trade a large local traffic of nearly a million dollars. Louisville, for the past ten years, has been the center of grain distribution for the Southwestern cotton states; but, owing to increased direct railroad communications the four great Southwestern cotton states have now become her largest customers. The principal grains shipped are corn and wheat. The latter is obtained mainly from Kentucky, Tennessee, and Southern Indiana, while in addition to these Illinois supplies her with corn, oats, and rye, the larger portions of these grains coming from north of the Ohio River. Owing to the large crops of the South last season the demand for the current year has been lighter than for any of the past seven years. The facilities for handling and storing grain are ample. Louisville has two large and several small elevators. The Louisville Elevator and Warehouse was built in 1874 by H. Verhoef & Co., who are extensive grain dealers. The elevator has a capacity for 250,000 bushels bulk grain and the warehouse for 50,000 bushels, used mostly for sacked grain. They can receive and ship over 100 car-loads per day. The Northern gauge railroad is on one side of the house, and the Southern gauge on the other, and it is accessible to all the roads entering the city. The Kentucky Public Elevator was erected last year on Fifteenth and Kentucky streets, by a joint stock company with ample capital. It has a capacity for storing 500,000 bushels bulk grain, and is also connected by switches with all the railroads entering the city. With her large resources and the steady increasing grain production of the surrounding country, and her increasing facilities for transportation, the prospect is that Louisville will rank among the principal grain markets of the Southwest.

In the vicinity of Champaign, Ill., the wheat yield was only about six bushels per acre.

Crops in Iowa have suffered much from late storms.

## A TRANSPORTATION ROW AT ST. LOUIS.

A suit was commenced in the United States Circuit Court, at St. Louis, Mo., on June 16, against the St. Louis and New Orleans, and the St. Louis and Mississippi Valley Transportation Companies, and the St. Louis, New Orleans, and Foreign Dispatch Company, by Messrs. D. P. Slattery, Wm. P. Ross, and James A. Hill, prominent stockholders in the latter company. The Dispatch Company, the plaintiffs stated, had been organized under the laws of the State of Illinois, with a capital stock of \$1,000,000 divided into 1,000 shares, of which the gentlemen owned 350. The object of the organization was to arrange and contract with railroad and ocean lines of transportation, so as to form a continuous transit of through freights, and establish a trade for other companies. This company is entitled to the damages the plaintiffs were now claiming, but its officers and directors had refused to take action, although such action had been demanded by a resolution of the stockholders and the request of plaintiffs, and hence the Dispatch Co. is also made a party defendant. The petition alleged that an agreement was entered into in 1881 between the Dispatch Co. and the St. Louis & New Orleans Transportation Co., which latter possessed towboats, barges, elevators, and wharf sites to a value of about \$1,000,000, on account of which the former company agreed to open offices, employ agents to make contracts, solicit business, and conduct its affairs in the cities of St. Louis, New Orleans, Liverpool, and at other points required by the business; and the Transportation Co. agreed to receive and transport all freight given it by the Dispatch Co., and pay said company 10 per cent. commission, subject to certain specified abatements at New Orleans. The contract was signed by the presidents and secretaries of the respective companies. Because of these facts the plaintiffs were induced to make large expenditures in behalf of this contract, amounting to \$25,000 in cash; while the Dispatch Co., at great cost, established agencies other than at the points above named at some fourteen different foreign ports, as well as at numerous places in the United States. But the Transportation Co., designedly, and to elude its contract obligations, in collusion with others conspired, and agreed to establish a new corporation, to which all the property of the old company was to be transferred, and the members of the new corporation were to receive shares of paid up stock equivalent to their respective interests in the old company, which was to be dissolved. In pursuance of these plans the St. Louis & Mississippi Valley Transportation Co. was organized, with a capital stock of \$2,000,000, and the transfer of property was made to the new company, which refused to recognize the above named contract. The petition alleged that the money earned and charged by the old company and its successor will be, and has been, \$2,500,000, of which the Dispatch Co. is entitled to 10 per cent. to which the \$25,000 invested as above stated is to be added, and judgment was asked for in the sum of \$275,000. The plaintiffs also averred that the original Transportation Co. is insolvent, and requested that its corporate existence be dissolved, and its transferred property be held as a trust fund for the benefit of the Dispatch Co. and its stockholders, and that accounts be taken of the value of said property, and of the past and prospective earnings, and that the amount due the Dispatch Co., according to terms of contract, and all damages and expenses be declared a charge on said property, and that a receiver be appointed.

## ANOTHER BUCKET SHOP DECISION.

Judge Drummond, on July 5, listened to the arguments in the case of Bryant, McCampbell & Co. vs. the Chicago Board of Trade and Western Union Telegraph Co. relative to dissolving the injunction restraining the defendants from removing the "tickers" from the office of complainants. The latter firm is a commission house, but is charged with doing business with bucket shops in Galveston, New Orleans, Kansas City, and Louisville. Judge Drummond sustained his previous decisions to the effect that the Board of Trade had the right to fix the conditions on which outsiders might come on its floor. The injunction is sustained, and permits the Telegraph Co. to withhold the information from the complainants obtained from the market reports of the Board of Trade, which are its private property, and under its control. This accords with all the bucket shop decisions on this point.



## Legal Notes.

### Fraud and Negligence of Factor.

A factor or other agent who is guilty of fraud or gross negligence in the conduct of his principal's business forfeits all claims to commission or other compensation for his services. Where a factor cunningly transmits to his consignor a grossly false and fraudulent account of sales, and does not enter the sales on his books until months after they are made, and then enters them falsely, no credit will be given to the factor or his books.—*Peper vs. Fordyce, United States Circuit Court, Arkansas.*

### When are Goods Delivered to Shipper's Order.

In an action against a common carrier for the loss of a cargo of bran delivered to it for shipment, the St. Louis Court of Appeals held that it was competent to show in discharge of the carrier that the goods which were directed to "shipper's order" were delivered according to orders of a person who, though not the general agent of the shipper, yet had, with the knowledge of the shipper, held himself out to the general public and to the carrier as the shipper. *Watson, assignee, etc., vs. Hoosac Tunnel Line Company, decided June 12.* In the opinion of the court, delivery to a shipper is estopped to deny that he was his general agent at the time, discharges the carrier so far as any claim of the shipper against the carrier for the loss of the goods is concerned.

### Option Contracts.

In an action to recover for the breach of a contract to sell, the defense was made that the transaction was a gambling one in options. The facts were that the defendant was dealing in options, through his broker, on the Board of Trade; that he failed to put up the required margin, and that the transactions were settled at a heavy loss, which was charged to him. The court said: "The evidence falls far short of what is necessary to establish illegality in contracts of this kind. All option contracts are not illegal, and the incident of putting up margins amounts to nothing unless the contract itself is illegal. The validity of option contracts depends upon the mutual intention of all the parties. If it is the *bona fide* intention of the seller to deliver or of the buyer to pay, and the option consists merely in the time of delivery within a given period, the contract is valid. If the contract itself is lawful, the putting up of margins to cover losses which may accrue from the fluctuation of prices in the final settlement of the transaction according to the usage and rules of the Board of Trade, is entirely legitimate and proper."—*Union National Bank of Chicago vs. Carr, United States Circuit Court, District of Iowa.*

### MILWAUKEE OPINIONS ON CORNERS.

The recent McGeoch failure in their lard venture, involving a large number of firms, and enormous sums of money, has again started the general discussion of the subject of "corners." The enterprising local press of Milwaukee has interviewed freely a number of the leading members of the Chamber of Commerce of that city, for the purpose of learning their views, especially, on the question, Does the manipulation of corners involve a violation of any of the principles of legitimate trade? As usual, a considerable variety of opinions was expressed, as viewed from different standpoints.

Mr. John Plankinton, of the large pork packing house of Plankinton & Armour, said that most of those who went into these operations came out worse off than when they entered. The majority were ruined. He saw no violation of any of the principles of trade in them, and their bad effects on business in general was apt to be overestimated. Other causes than Mr. McGeoch's corner, Mr. Plankinton said, had affected the market. It did not advance the prices to those of last year, because the same demand for provisions did not exist.

Mr. S. W. Tallmadge expressed his views in very clear and forcible terms. There is no mistaking his graphic account of the benefits of corners. Mr. Tallmadge said that he believed that "corners are a benefit to the trade, because the producers get the benefit of good prices for their productions, and the producer is the foundation of commerce." You get money in the hands of the producer and all business is in a healthy condition. I believe a

man has the right to buy all the property he can pay for. On the other hand, I don't believe a man has the right to sell what he does not possess. It is argued that property cannot be sold for less than its intrinsic value. This impression is a false one, for many times have cliques been formed to sell down wheat, and have offered it so freely that prices have been broken far below its value. In 1877, when wheat was selling at \$1.30, and the bulk of the stock in Milwaukee and Chicago was held by one party, a combination was formed against this party which offered hundreds of thousands of bushels at one, two, and three cents below the market, forcing the holders out for want of money for margins. There soon followed a legitimate advance of over sixty cents per bushel. Again, were it not for excessive short selling we would have no corners. Parties who have not the property will sell it short, in the hope of buying it at lower figures, and I believe that a party who sells what he does not possess should either be obliged to deliver or pay the penalty. Again, it is argued that corners block the wheels of commerce and prevent the legitimate movement of business, and cause great losses to the country. The grain which may accumulate during the progress of a corner all moves out in time, and the only losers are a few speculators who are trying to depress the value of property, while on the other hand thousands of dollars are going into the hands of the producers. The Youngs' pork corner of a few years ago placed considerable money in the Northwest; the corner in barley run by the same parties also placed large amounts throughout the Northwest; Smith's wheat corner did the same. The Schroeder & Lindblom corner placed in the hands of the farmers at least \$2,000,000; the Keene deal in 1877 scattered throughout Wisconsin, Minnesota and Iowa at least \$5,000,000; following these came the Armour pork and the McGeoch lard deals, and again two wheat deals, one by Handy and the other by McGeoch, all of which must have placed at least \$20,000,000 in the hands of the farmers, over and above the ordinary value of the property. Now, who were the losers in these transactions? No one but the short sellers, or parties who were trying to depress the productions of our farmers. The farmers are the gainers, and this gain thus placed in the farmers' hands has been freely invested with the merchants, the manufacturers, and paid to the laborers of the country."

Mr. J. B. Oliver believed that corners always benefit consumers. He has had experience on both sides, and does not believe that any man ever went in to run one intentionally. Corners naturally grow out of the "bull" element trying to sustain prices against the efforts of the "bears" to depress the market, who persist in selling what they do not possess, and never expect to deliver. Mr. Wm. P. McLaren, of the firm of Wm. P. McLaren & Co., said that he had never been squeezed by a corner and never had managed one. He believed they work an injury to trade by inflating prices temporarily, and when the collapse comes many farmers suffer from losses. Mr. McLaren agreed with the others that there were no legal remedies for this evil that could be made efficient. Mr. E. P. Bacon, of the firm of E. P. Bacon & Co., presented views in striking contrast with some of those expressed by other large dealers. Mr. Bacon said: "While the whole business of cornering is a systematic method of extortion, nevertheless it is a necessary correction for the excessive short selling, and consequent depreciation of prices, that would ensue in the absence of any counteracting influence. I regard it as a game on both sides, and conducted from the same motives and purposes on both sides, and neither party is entitled to be indispensable by the boards of trade of the country to maintain the inviolability of contracts under any and all circumstances; and, with an inflexible enforcement of rules, both parties may be free to play out their own game and take the consequences. It is true that sometimes a party is compelled to buy property offered for future delivery, simply to sustain the market on a large stock he may have bought for legitimate purposes. But, as a general thing, corners are started simply for the purpose of taking advantage of short sellers. The running of McGeoch's corner raised prices and increased production beyond all demand; and it is only by handling provisions with a steady hand, as the market demands, that a calamity can be averted."

The Howe Scale took first premium at Philadelphia, Paris, Sydney, and other exhibitions. Borden, Selleck & Co., agents, Chicago.

## Communicated.

### A RUBBER BELT.

*Editor American Elevator and Grain Trade:*—Can some of your readers or advertisers tell me how to put rubber belts together so as to make an endless belt. I would like to make the main belt in our elevator endless.

Yours, etc.

C. H.

### A COMPLIMENT FROM NEBRASKA.

*Editor American Elevator and Grain Trade:*—Having a little spare time I looked over your ELEVATOR AND GRAIN TRADE for June, and was impressed with the large amount of valuable reading it contained for eight cents, and I thought it ought to be in the hands of every grain man. Even farmers, who raise grain, could get more than one dollar's worth a year out of it. I noted the "Bucket Shop" articles; the "Insect Enemies of Corn;" "Corners and Sales of Merchandise for Future Delivery;" "A Report on Grain Dealing;" "Properly Built Elevators;" "Elevator Fires," and the "Craze for Speculation" as all being pat, and should be read and heeded by all in any way connected with the trade. Our motto is the best of everything, and under that head, is included the AMERICAN ELEVATOR AND GRAIN TRADE. I have to report the elevator business here as booming. Messrs. Nye, Colson & Co. of Fremont, Neb., will commence building in July a Seeley Elevator at this place, the largest one we have ever built. The Elkhorn house, known as the Roanoke Elevator, is under way. The prospect for corn in this state I think is fully as good as it was last year at this time. I know of no state that can stand wet weather as well as Nebraska. Hoping the ELEVATOR will fill the niche that it is intended for, I am

Yours truly,

M. F. SEELEY, of Seeley, Son & Co.

Fremont, Neb.

### IMPROVING THE MISSISSIPPI.

A paper was recently read before the Civil Engineers' Club of Cleveland, Ohio, by Chas. Whittlesey, on the exhaustless subject: "How to Relieve the Mississippi River in Periods of Extreme High Water." The plan proposed is not to control, but an effort to assist the river to relieve itself in case of dangerous floods, say twenty-five or thirty feet above low water. The eastern affluents, below the Ohio, are not important, the Yazoo being merely a bayou, whose inlets could be kept closed if ten feet can be taken from extreme high water. To accomplish this, and relieve the valley, the writer proposes to carry off the surplus water from near New Madrid to the Gulf at the mouth of the Atchafalaya River, by a new channel through the series of valleys and bayous on the west side, controlled by inlets or waste-weirs. The following are the leading points: *First.* Cuts to be made between the heads of the Atchafalaya and the Red River, and the capacity of the Atchafalaya to be increased by artificial means. *Second.* The same for Black River and its eastern affluents, to be connected with Lake Providence and the lower parts of the Arkansas River. *Third.* By the most feasible route, using the White and St. Francis Rivers, to be connected, artificially, with the high levels of the Mississippi, near New Madrid. A new river would thus be formed parallel to the present, with the same general descent. Its channel would become enlarged by the water poured in at all the inlets. When the flood water is lowered the main levees will be more secure, and large tracts of land by the lateral levees, at less cost and greater permanence, can be brought under cultivation. Natural causes are steadily increasing the height of floods, and limiting embankments operate in the same manner.

This system, it is estimated, would be far less costly than by embankments, whose annual repair would greatly exceed the cost of channel dredgings, which are made far more easily. The injury done to the present low-water channels is, in extreme high water, the extra velocity and momentum acquired with its pressure, and destructive wearing of banks and levees, which cause at least one-half of the losses of plantations from this uncontrolled river. Perhaps, says the author, this is beyond human power, but the chances are more favorable when the agency used is in unison with instead of opposition to its forces. These principles have been long since successfully applied on lesser streams and reservoirs.



## CORNERS AND SALES OF MERCHANDISE FOR FUTURE DELIVERY.

A paper read before the Senate Investigating Committee of the State of New York, Nov. 27, 1882, by A. E. Orr.

With your permission, I will give, ere closing, three illustrations of this practice. One is taken from the writings of a gentleman very prominent in public life, and for whose integrity and indomitable energy I have a profound respect (I mean the Hon. John Kelly of New York), and two from statements made to this committee by witnesses who considered themselves competent to suggest remedies.

I wish it to be distinctly understood that I mean no disrespect to the gentlemen from whom I quote. I am sure the one, and I trust the others, would not willingly mislead, but my desire is to point out how easy it is for a man of influence and intelligence to be himself misled into making very misleading statements.

The Honorable John Kelly, in a comparatively recent letter to the Anti-Monopoly Conference held at Albany, makes the following remarkable declarations:

"Even opium, which forms the basis of laudanum, paregoric and other needed medical compounds, and which, from the very nature of its production and excessive customs duties, is expensive, has been made the subject of a 'corner.' A few Wall street speculators formed a syndicate to control the imports, and the price was advanced from \$2.50 to \$6 per pound, compelling the inhabitants of tenements to pay the full price of a day's living to secure enough medicine for the child that was dying for need of this medicine."

Admitting that a corner had exaggerated the value of the pound of opium to six dollars (the doing of which I condemn as heartily as Mr. Kelly), that does not justify the balance of his sensational remark. A pound of opium (Troy weight) contains 5,760 grains. I am informed by a respectable physician that one grain of opium or its product is a dose for a child, whether it lives in a tenement house or a Fifth Avenue mansion. If this estimate is correct, sufficient opium for ten doses would only cost one cent instead of the unknown quantity of "the full price of a day's living," as Mr. Kelly has it. If Mr. Kelly's typical "child" should unhappily die for need of opium, the blame must be laid at some other door than the opium corner. That would be only fair play.

It may be a pleasure to know that the opium "corner" referred to proved a disastrous failure to all interested in it, and the lesson it taught is expected to be permanent.

Again, in the same letter, Mr. Kelly writes:

"The same condition of things exists in breadstuffs, and even the great staff of life is made a mere plaything of the selfish speculators of the Produce Exchange. When men like James R. Keene are crushed between the upper and nether millstones of Wall street operators, they rush to the Produce Exchange, and, by making corners in wheat, flour and provisions, seek to retrieve their failing fortunes. Mr. Keene, Armour & Co., of New York and Chicago, and their associates, have repeatedly locked up all available breadstuffs, for no other purpose than to create an artificial stringency and advance the price, compelling the consuming classes to pay exorbitant prices for the bread which nourishes and sustains life."

This would be a very terrible state of affairs, if Mr. Kelly did not again draw upon his imagination. He cannot be altogether blamed for not knowing better, for many of the newspapers of that day (1880), when the corner referred to was said to be in operation, were equally erroneous in their statements.

The wheat crop of that year was estimated at nearly 500,000,000 and the corn crop at 17,050,000,000 of bushels. If Mr. Keene, therefore, was "crushed" in Wall street, how was he able to buy up "all available breadstuffs"—the estimated value of which (the wheat alone) was about \$650,000,000? If Mr. Kelly had charged that Mr. Keene and his associates had tried to destroy the trade of the city of Montreal by damming up the falls of Niagara with a garden spade, it would not have been a more ridiculous charge to have made in the interests of the Canadian government against these alleged corner managers.

But Mr. Kelly further states that the effect of these purchases upon the consuming classes compelled them to pay "exorbitant prices for bread." Now, although disapproving of this corner as much as Mr. Kelly, the

truth must be told, and therefore permit me to show you the measure of its effect upon the "bread" which Mr. Kelly so truly says "nourishes and sustains life."

Mr. Keene's corner had little effect in New York; its influence was principally confined to Chicago, where the stock never exceeded a few millions of bushels, a mere bagatelle of the wheat crop of that year, and for the time being it possibly gave an exaggerated value to wheat in that market of from 10 to 15 cents a bushel.

But assume that this influence extended to all markets in the United States, the result would be as follows while the corner lasted:

Five bushels of wheat will make about 120 loaves of bread (the usual size). The fictitious value of the wheat in those 120 loaves, estimated at the outside figure, would be 75c., or little over half a cent per loaf, or, at outside, one cent added to the cost of a bread ration of an able-bodied man for one day. Truly, corners and aggressive corners especially, are demoralizing, but their effects are not so sadly afflicting as Mr. Kelly paints them.

My second illustration is from the sayings of Mr. F. B. Thurber, who has so lately testified before your committee, and who appears to have very exaggerated ideas upon this and other subjects. I have seldom seen a statement, of the very many with which he is credited, that would bear investigation, or which could be followed to any logical conclusion.

Take for instance, as an example, the remedy he has suggested to you as a corrective of (what he deems to be) the baneful effects of dealing in products for future delivery.

"I would prohibit," says Mr. Thurber, "a man selling what he did not possess, excepting in the case of a farm or factory, where the growing crop or regular product furnished a reasonable basis in legitimate trade for such transactions. In short, I would make actual delivery a basis for a lawful transaction."

Now the meaning of this (if it really has any sense in it at all) is that he would permit the farmer to take the chances and sell what he has not got, but at the same time he has forgotten to provide the farmer with a purchaser, unless he intended by inference, that the purchaser was to be another farmer.

But assume for a moment that Mr. Thurber did intend that the farmer might sell for future delivery, that which he did not possess, to a merchant, then the merchant must sit down and wait till the farmer gets it, because Mr. Thurber says, "I would make actual delivery a basis for a lawful transaction," except for a farmer.

But suppose the farmer's crop failed, and he never did get what he sold to the merchant and promised to deliver him at a future day, what then? Why, Mr. Thurber would say: "Oh, the wicked merchant has cornered the farmer, put the rascal in Coventry for daring to take advantage of the honest farmer."

But examine Mr. Thurber's remedy from another standpoint. Is not intelligent forethought an essential element in commerce?

Mr. Thurber is a grocer having a large trade, and Messrs. A. A. Low & Bro. are prominent importers of teas. Mr. Thurber finds that the demands of his customers upon his stock of tea will exhaust it in three months unless he provides for its replenishment. What is more natural and legitimate than for him to call at Mr. Low's office and enter into a negotiation for the purchase of 1,000 chests to be delivered prior to the date of his expected need. But, perhaps Mr. Low may say, I have not the tea you want now in stock, but I expect to receive it soon, and will sell you 1,000 chests deliverable in sixty days from this date. As this suits Mr. Thurber's business requirements, he accepts Mr. Low's offer and the trade is consummated.

I cannot say what Mr. Thurber's opinion of such action on the part of Mr. Low would be, but I am positive that Mr. Low would have no idea that he and Mr. Thurber had committed the sin of gambling.

But let us follow his transaction a little further. Before the sixty days come around, suppose that tea has advanced in value, and Mr. Thurber finds that, owing to the advance, the demand for tea from his customers has been lessened, and he now believes that 500 and not 1,000 chests will meet his trade requirements. Should he be debarred the right to sell the surplus 500 chests to a brother grocer who might need them, or even back again to Mr. Low, if that gentleman desired to purchase them?

Permit me now to call your attention to Mr. Thurber's statement relative to petroleum and the Standard Oil Company:

"Petroleum is a staple," Mr. Thurber says, "ranking third in the list of our nation's exports."

Here are export values taken from the Chamber of Commerce Reports for 1881:

1. Breadstuffs.....	\$270,332,519
2. Cotton.....	247,695,746
3. Provisions.....	145,793,989
4. Oils.....	39,077,133

Petroleum is not a third, but a modest fourth, as shown by these figures.

Of these total exports, valued at \$39,000,000, products of petroleum of over \$30,000,000 value, were shipped from the port of New York alone, in a large measure owing to the fact that the Standard Oil Company had located itself in this city, instead of some other seaboard port, where Mr. Thurber would have driven it, if (as I believe) he could have had his way in times gone by.

Equally erroneous is Mr. Thurber's statement that the Standard Oil Company, "through its speculative manipulation, has, within a few weeks, more than doubled the price of crude oil, and its profits thereby are variously estimated at from \$20,000,000 to \$40,000,000."

If Mr. Thurber has studied the subject at all, he well knows that a short time before the rapid advance in crude oil took place, there was a very rapid decline, caused by the discovery of what at first promised to be, very prolific oil territory. When it was discovered that this expectation was delusive, oil rebounded to its former value and some thirty to forty cents per barrel beyond it, before the excitement culminated.

I believe the Standard Oil Company had just as little to do with the advance as Mr. Thurber, but even if it had, and he (Thurber) was a lover of fair play, he would have first credited that company with the value of the decline before he debited it with the sum total of the advance, and tried to make you believe that it was wholly due to its unprincipled action.

I profess to know little of the oil interest, but I have watched, with pleasure, its development as an article of export from this port.

The production is about 70,000 to 75,000 barrels per day. The consumption, the world over, is from 55,000 to 60,000 barrels per day, leaving a daily surplus to be cared for of from 15,000 to 20,000 barrels. The stock on hand in the United States to-day is estimated at 35,000,000 barrels, and it has been accumulated to this enormous figure in the past five years or thereabouts.

It is a most important element in the commerce of New York, and, as I have before stated, gives employment to from 1,750 to 2,000 vessels from this port each year. It is estimated that the disbursements of a single vessel amounts to \$3,000, so that the sum of from \$5,000,000 to \$6,000,000 is annually received from this source alone by the different interests dependent upon vessel disbursements for their livelihood, of which labor furnishes the largest factor.

In caring for this daily surplus, and this enormously increasing stock, I believe the Standard Oil Company and its associate Storage and Pipe Line Companies are eminently fitted. I know nothing about their profits or their losses, as I have never been interested, directly or indirectly, in any of these companies, but I will stake my reputation for ordinary intelligence, that, if you will call the officers of the Standard Oil Company before you, you will obtain much valuable information relative to the commercial value of sales of oil for future delivery, and establish the fact that there is scarcely an atom of fairness in Mr. Thurber's statements concerning their company.

My third illustration is taken from the testimony (also given before this committee) of Mr. Pierce, the commercial editor of the *Commercial Advertiser* of New York, as reported in the *New York Tribune* of the 28th of May last:

"Harland Pierce, commercial editor of the *Commercial Advertiser*, was the first witness. He described at considerable length the making of 'corners,' and said: 'The tendency of corners is to enhance prices, and this is likely to bring out grain or whatever is being 'cornered,' this, in time, tends to depress prices. The 'corner' formed by James Keene and others in 1879-80 increased the price of wheat to \$1.60. This price was kept up during nearly the entire crop year, causing ships to be tied up for two and three months. The clique finally closed out the remainder of their holdings, about 10,000,000 bushels, at an average of \$1 per bushel. The amount paid for the wheat by the consumers between this price, \$1, and the higher price, \$1.60, was a loss to the country. The amount lost by the clique in the end was away up in the millions. The high price of wheat for the last few



months has been due, in good part, to the 'corner' manipulated by several large operators."

I desire to direct your attention specially to three statements of Mr. Pierce:

1st. The "corner" increased the price to \$1.60 per bushel.

2d. This price was kept up during nearly the entire crop year, causing ships to be tied up for two or three months.

3d. The amount paid for wheat by the consumers between this price, \$1, and the higher price, \$1.60, was a loss to the country.

Mr. Pierce's first statement is correct, if he intended his quotation to mean No. 2 Red Winter Wheat (the most valuable general shipping grade of wheat), and the place of quotation New York, where it maintained the highest value. In the month of December, for just four days, namely, the 24th, 26th, 27th and 29th, wheat of this quality and grade sold in New York respectively at \$1.60, \$1.60½, \$1.60½ and \$1.60¼. At no other time throughout the year (that is the crop year from 1st September, 1879, to 1st September, 1880), can I find a record of \$1.60 per bushel being reached, except in the four instances stated above. I give herewith the highest and lowest quotations of each month during the twelve months of 1879 and 1880 (the crop year):

September, 1879, 109½@130	March, 1880, 137½@150
October, " 128 @151	April, " 126 @140½
November, " 135½@148½	May, " 127½@146½
December, " 148½@160½	June, " 115 @133
January, 1880, 139 @158½	July, " 102½@127
February, " 143½@150	August, " 105 @109½

This shows how utterly faulty Mr. Pierce's second statement is, viz.: That this price (\$1.60) was kept up nearly the whole crop year.

The average for the year was really about \$1.33, and that was the intrinsic value of the wheat, not on account of the "corner," which was only operative in New York for a very short period, but because of the partial failure of the grain crop in Great Britain and the Continent, which caused an active and at times intense demand for our surplus. The demand began to be developed soon after the opening of the crop year, in September, 1879, when the price of No. 2 red wheat was about \$1.10 per bushel; but during that month it advanced to \$1.30, and the month following to \$1.50, and held that advance, with sundry fluctuations, till the following April, when the price fell off to about \$1.35 for that month and May, and to an average of \$1.25 for June, \$1.15 for July, and \$1.08 for August, after the crop of 1880-81 had been assured. As a proof that this advance was caused by legitimate demand, and not by corner operations, as Mr. Pierce states, I give you the quantity of wheat and flour exported from New York for the crop years 1877-8, 1878-9, 1879-80, 1880-1:

#### Wheat exported in—

1877-8.....	46,303,410 bushels.
1878-9.....	60,526,402 "
1879-80 (the corner year).....	67,706,602 "
1880-1.....	50,773,822 "

#### Flour exported in—

1877-8.....	2,443,603 barrels
1878-9.....	3,740,755 "
1879-80.....	4,113,854 "
1880-1.....	5,174,976 "

The export of wheat and flour taken together during the crop year 1879-80 (Mr. Pierce's corner year) was the largest ever made before or since in the history of the United States, and yet Mr. Pierce would have you believe that the grain that year was held above the reach of export, and that the ships were tied up to the docks, wanting cargoes, in consequence.

To show, however, that the demand was not confined to the city of New York, I give the declared values of all exports of breadstuffs from the United States for the same year, which is equally convincing:

Exports in 1877-8.....	\$181,811,794
1878-9.....	208,615,057
1879-80 (the corner year).....	288,036,835
1880-1.....	270,332,519

From these figures it must be seen at a glance, that if prices had not been advanced and the outflow checked soon after the opening of the crop year of 1879-80, we would have been drained of our surplus at a price far below its intrinsic value, and as a result (which has twice happened in my own business experience) been obliged to import wheat from abroad at exorbitant values, to meet daily needs prior to the maturity of the crop of 1880-81.

This condition of affairs actually did exist in Australia the past year.

With regard to Mr. Pierce's third statement, it is so evidently erroneous that I will not delay you longer by pointing out its inconsistencies. What I have said rela-

tive to his testimony, and it is all based upon Mr. E. H. Walker's reports (the talented statistician of the New York Produce Exchange), must convince you that Mr. Pierce's statements should have no weight with you whatever.

Instances like these could be enumerated indefinitely, but it would be useless to illustrate further.

In conclusion, I respectfully submit two suggestions:

1st. That commerce can best solve the problems essential to its own well-being, without undue legislative interference.

2d. That the commercial value of "sales and purchases for future delivery" would be enhanced if a law existed which withheld legal effect to such contracts, unless an original margin of not less than ten per cent. of the value of the contracted article was deposited by each party, as may be agreed upon, and the same kept good, upon written notice, against fluctuations in market value, pending the maturity of the contract.

Respectfully submitted,

A. E. ORR.

## General Items.

The first consignment of the new California wheat crop arrived in San Francisco a few days ago, and sold for \$1.65 a bushel.

The history of "corners" in Chicago shows that, with the exception of possibly three, all of the men who have operated them have become hopelessly bankrupt, and several who have been connected with them have committed suicide.

The area of the growing crop of oats in Illinois is larger than that of 1882, when the largest crop ever produced in the state was grown. The area devoted to this crop in 1882 was 2,461,655 acres, which produced 99,275,380 bushels, valued at \$41,062,611 in first hands. The average present condition of the crop throughout the state is very nearly as good as it was at this time last year.

In a recent issue, commenting upon our breadstuffs abroad, *Bradstreet's* says: "It would hardly be wise to do any predicting in detail on this subject, but with the rapid growth of India, Chili, and New Zealand as wheat exporters, not to refer to the probabilities of Russia and Australia in the same direction, it becomes a matter of extreme doubt if the United States is again to occupy a position to dictate the price of wheat in Mark Lane. The effort has been made to do so this year."

For ten years, ending 1871, the United States exported to the United Kingdom 83,588,656 cwt., or 27.3 per cent. of the entire importation, and Russia 91,597,017 cwt., or 29.3 per cent. of the import. In the next ten years, ending 1881, the United States exported 252,830,122 cwt., or 52.6 per cent. of the whole imports, while Russia fell to 86,707,988 cwt., or 17.3 per cent., and Germany, which supplied during the ten years ending and including 1871, 18.9 per cent., fell to 6.84 for the next ten, ending in 1881.

If we accept the statistics of the United States census for 1880, we find the annual production of corn in the whole country amounts to something over 1,700,000,000 bushels, of which over 100,000,000 bushels were grown in Ohio. The wheat grown in the whole country is nearly 500,000,000 bushels, of which almost 50,000,000 bushels were grown in Ohio. The oats grown in the United States were upward of 300,000,000 bushels, of which 25,000,000 were grown in Ohio. The barley produced by the whole country was 45,000,000 bushels, and in Ohio, 1,500,000 bushels. The total rye crop was 24,000,000, of which less than 500,000 bushels grew in Ohio.

Phil. D. Armour, one of the grain and pork speculators of Chicago, is of sturdy Scotch stock. Born in one of the central counties of New York, on a farm among the hills, it was the highest ambition of his boyhood days to earn money enough to buy the farm adjoining his father's. When the gold fever broke out he was still a mere strip-ling; but, full of youthful enthusiasm, he started for California, driving a wagon across the plains and mountains. He remained there three or four years, and in that time saved a few thousand dollars. He had cash enough to buy the farm, and settle down. He had no sooner reached home than he experienced a sudden revulsion of feeling. The streets of the village looked narrow, cramped and dull. The house appeared mean and dingy.

He only remained on the farm two or three days, and then took himself to Cincinnati. Later he drifted to Milwaukee, and at the close of the war he sold a great lot of pork at \$40 a barrel, and bought it in again at \$18 to \$19, realizing a profit of about a million. To-day he ranks as the wealthiest man in Chicago, being rated by those who know something of his business at \$25,000,000 to \$30,000,000. His transactions are colossal. His firm employs between 5,000 and 6,000 men, and on his pay rolls are about fifty men who receive salaries of \$5,000 and over. He is not yet fifty-five years of age.

Uncle Rufus Hatch has been unbosoming himself to a New York reporter upon the subject of corners in provisions, the railways, etc. "I see in them," said Mr. Hatch, "a far-reaching disaster to the agricultural and commercial interests of this country. Every article that is raised from the soil or produced by the manufacturer brings a value, and this value is regulated by the laws of supply and demand. So long as this is the case with any commodity the trade therein may be said to be in a natural and healthy state. When corners are formed to buy up and lock up lard, grain, cotton and hogs, or any other article of daily consumption or use, making them unnaturally scarce, the result must be injurious." "Injurious," undoubtedly, but chiefly to the cornerer. Rightly looked at a corner in produce is a co-operative, mutual benefit association, in which a certain number of people pay large sums of money for the pleasure of speculating. The sums thus contributed are in part divided among the brokers who hold the speculators' hats. The remainder goes to the owner of the grain, a part of whom are farmers, who are lucky enough to unload at the right time. As "action and reaction are equal and opposite," it follows that what is "made" is merely transferred from one set of pockets to another. Eventually the wheat or the lard must travel upon their merits. And the cornerer upon his, which are sometimes small.

## OUR WHEAT PRODUCING CAPACITY.

Brother Jonathan's ability to produce wheat, corn, pork and beef in quantities to suit, seems a prolific source of disquietude among certain transatlantic political economists. The agricultural history of the last ten or twelve years has piled up enormous sums total of our production of the staple foods. Our wheat crop has doubled in less than ten years and our corn crop nearly doubled in the same period. We have showered the surplus in one form and another upon our neighbors of Western Europe, until some of them have experienced a genuine alarm lest their agricultural industry be swept away.

Quite a number of interested investigators have, in consequence of this wide-spread uneasiness among the agricultural classes of Western Europe, betaken themselves to our shores to "size up," as it were, our food-producing capacity and satisfy themselves whether its limits have been nearly reached or whether it is practically unlimited. One of the latest of these friendly spies is Dr. Max Sering, an eminent German scientist. He has traversed our principal wheat regions and has made up his mind upon the principal point upon which knowledge was sought. He thinks that the limit has been nearly reached in California, while in Oregon and Washington territory he concedes that there are vast areas which are possible wheat fields. The same is measurably true of Montana. Dakota and Minnesota he finds still have large areas which may profitably be devoted to wheat culture. Nevertheless, Dr. Sering believes that the United States is "near the limit of its ability to flood Europe with cheap wheat," and when this limit is practically reached, it will then be only a comparatively short time before we will require all our products for home consumption. The chief ground on which he bases his assumptions is that the great increase in our wheat production of late years has been caused by the opening and settlement of new land and not from an increased production of the older grain fields.

Without controverting all the statements made by the Doctor or putting against his opinion respecting the wheat-producing capacity of California the claim made by some of her people that she has the land to raise as much wheat as the whole country produced last year, we would suggest that he could not have examined the statistics of our cereals very closely, else he would not have ventured the opinion that the average production of the older fields is not increasing. The very converse is true. It is susceptible of proof that the average yield of wheat per acre in all or nearly all of the older states, is increasing steadily. Furthermore, notwithstanding the abnormal growth of our cities and the creation of manufacturing interests which would be supposed to withdraw a large number of people from agricultural pursuits, our production of wheat has been steadily increasing per capita for the last thirty years. No doubt the limits will be reached some time; but the present generation need not worry about it. Travelers from New Zealand may at that time be drawing sketches and moral lessons from broken bridge-arches in London and Cologne.—*American Miller*.



# Elevator and Grain News.

Memphis has ten cotton seed oil mills.

A new flax mill is to be built at St. Paul, Minn.

A new grain elevator is to be built at Monroe, Mich.

John Gregory, grain dealer at Marion, Ohio, has failed.

Beach Bros., grain dealers at Alton, Iowa, have sold out.

A 30,000 bushel house is to be erected at Bathgate, Dak.

The Strawn warehouse at Strawn, Ill., will be closed soon.

G. R. Hurd of Monroe, Mich., is building a new grain elevator.

Hamilton, Dak., is to have a 30,000 bushel elevator built there.

The flouring mill at Mandan, Dak., is to have an 85,000 bushel elevator attached.

The extensive grain firm of Traill, Maulson & Clark of Winnipeg, have dissolved.

The Porter Milling Co. of Winona, Minn., are building a large elevator at Gary, Dak.

E. M. Hale of Danville, Ill., is building a new grain elevator for Edwin Rice at Paxton, Ill.

The Memphis Grain and Package Elevator at Memphis, Tenn., covers seven acres of ground.

H. S. Gilbert will connect his warehouse at Ottawa, Ill., with the C. R. I. & P. Railroad by a switch.

S. Winfield of Chanute, Kan., dealer in grain and agricultural implements, has made an assignment.

The grain firm of Asmuth & Kraus at Milwaukee, Wis., has been dissolved. F. Kraus & Co. succeed.

Fred L. Marks, proprietor of Flint City Elevator at Flint, Mich., has just completed a new elevator at Monroe, Mich.

Stiles, Goldby & McMahon, grain and provision commission merchants of this city, have made an assignment.

D. C. Freeman, a grain speculator at Louisville, Ky., has disappeared, leaving liabilities to the extent of \$10,000.

Capt. Ed. Smith of Ottawa, Ill., has been appointed to a clerkship in the office of the Chief Grain Inspector at Chicago.

The Harrison Conveyor Co. of Chicago, Ill., have lately shipped to Silas Dean of Oak Hill, N. Y., 100 feet of conveyor.

Smith & Porter of Freeport, Ill., are rebuilding their elevator, recently burned. Savage & Love of Rockford, Ill., have the contract.

C. A. Pillsbury & Co. of Minneapolis, Minn., are enlarging their elevator and putting in two No. 6 Excelsior Separators and Graders.

One day lately Milwaukee parties purchased 250,000 bushels of No. 2 wheat for export, and ordered 150,000 bushels bought at Chicago.

Beale Bros. & McDonald of Bayard, Iowa, have just shelled and shipped 60,000 bushels of corn. They own the largest elevator in the place.

Timothy Smith, a clerk for a Boston broker, is a defaulter to the amount of \$17,000. Bucking the bucket shop was how he lost the money.

Messrs. Nye, Colson & Co. are about building a 50,000-bushel elevator at Fremont, Neb. Seeley, Son & Co. of the same place, have the contract.

The Harrison Conveyor Co. of Chicago, Ill., have put in for the Chicago Anderson Pressed Brick Co. 600 feet of their conveyor for handling clay.

The Harrison Conveyor Co., Chicago, Ill., have shipped recently to H. H. Gilson of Bethel, Vt., 200 feet of their conveyor for handling grain, feed, etc.

The Harrison Conveyor Co. of Chicago, Ill., have recently shipped to H. B. Rathbun, Deseronto, Ont., 600 feet of conveyor for handling sawdust.

Messrs. Bouslough of Shabbona, Ill., have purchased G. Losee's elevator at Sandwich, Ill. They are young men of ample means and high standing.

Gill & Fisher of Baltimore, Md., the well-known grain firm, have admitted Blanchard Randall to partnership. The style of the firm remains unchanged.

The Harrison Conveyor Co. of Chicago, Ill., have an order from the Whitebreast Coal Co. of Cleveland, Iowa, for 350 feet of conveyor for handling coal.

The Harrison Conveyor Co. of Chicago, Ill., are putting in 300 feet of their conveyor in Michael Siebur's Malt House in this city, for handling wet and dry malt.

The Harrison Conveyor Co. of Chicago, Ill., have recently shipped 150 feet of conveyor to W. H. Benedict of Vermontville, Mich., for handling grain, feed, etc.

Frank N. Hafer, a grain dealer at St. Paul, Ind., has failed and left the country. It is said that his failure is the result of his dealings in wheat options in Chicago.

P. B. Sanburn at Port Huron, Mich., is remodeling his elevator at Sarnia, Can., and putting in all late improvements. J. C. Smith of the same place is the millwright.

Geo. Gaylord & Co. of Lockport, Ill., on account of the ill-health of the senior partner, have announced their intention to sell out their warehouse and commission business and leave the place. They have been in the business

there over twenty years, and are among the most wealthy as well as the most reliable and substantial firms of the place.

The Harrison Conveyor Co., Chicago, Ill., have recently put in 200 feet of their conveyor for J. Jenks & Co. of Sand Beach, Mich., for handling grain, feed, flour, etc.

The Harrison Conveyor Co. of Chicago, Ill., have recently put in Michael Brand's Malt House in this city 350 feet of their conveyor for handling wet and dry malt.

Pillsbury & Hulbert will erect this season a large elevator at Maples, Dak., at which point it is expected from 80,000 to 100,000 bushels of grain will be marketed this year.

The Harrison Conveyor Co. of Chicago, Ill., have an order for 500 feet of conveyor for A. Barth & Co., tanners at New Albany, Ind., for handling dry and spent tan bark.

The Kansas Central R. R. Elevator Co. of Leavenworth, Kan., are increasing their capacity and have placed their order for machinery with the Great Western Mfg. Co. of the same place.

The Ogilvie Milling Co. are putting up a large elevator at the end of their fine mill on Point Douglas, Winnipeg, Manitoba, as well as five more at different points in the province.

The Harrison Conveyor Co. of Chicago, Ill., have recently put in the Wacker & Birk Brewing Co.'s Brewery 100 feet of conveyor for moving grain from mash tubs to the outside of the building.

The Harrison Conveyor Co. of Chicago, Ill., have, in the past month, put in for the Kentucky Oak Tanning Co. of Louisville, Ky., 250 feet of their conveyor for handling dry and spent tan bark.

N. G. Miller of New York, has been admitted as a general and W. S. Williams as a special partner in the firm of Robt. Lindblom & Co. of this city. The New York end of the firm will be known as Miller, Lindblom & Co.

S. H. Cockrell & Co. of Dallas, Tex., have forty men at work on their new roller mill and elevator, which they expect to start up by Aug. 1. Todds & Stanley Mill Furnishing Co. of St. Louis, Mo., have the contract for the machinery and furnish the millwrights. J. R. Burns is superintending the work.

New articles of incorporation of the "Grand Forks Roller Mill," Grand Forks, Dak., were recently forwarded to the Secretary of the territory. The capital stock has been increased from \$40,000 to \$100,000, and the new company intend to erect at once a mammoth elevator, which will be run in connection with the White Elephant Elevator. The new incorporators are Messrs. McCormack, Smith, Griggs, Titus, Lyons, Walsh, Zeffass, Linton, Wybrant, Budge and Eshelman.

Among the recent contracts secured by the Porter Iron Roofing Co. of Cincinnati, Ohio, are the following: Iron roofing and siding to cover all the buildings of the Western Nail Co. of Belleville, Ill.; iron roofing and siding for the Isabella Furnace, Barneston, Pa.; galvanized iron, No. 20 gauge, for the county buildings at Winnemucca, Nev.; iron roofing and siding for the Oil Works at Newport, Ark.; roofing and siding for the Chicago Tyre & Spring Works buildings, Chicago, Ill.; iron roofing for a large mill at Socorro, N. M.; iron roofing for the Match Works at Brownsville, Me.; iron roofing for large smelting works at Tombstone, Ariz.

J. C. Haines & Co. of Augusta, Kan., are enlarging their elevator and putting in another dump and driveway. When completed it will rank with any elevator on the line of the St. Louis & San Francisco Railroad. This elevator has in connection a run of first-class stones for meal and chop with all the necessary elevators, bolts and cleaners for making first-class meal. Also in time will have a stone saw attached to power for sawing out all kinds of trimmings for brick and stone buildings. In connection with the grain trade, the firm are doing an extensive business in all kinds of coal and plastering material, and in shipping building stone of the finest quality found west of the mountains.

Frank Bryan, a grain dealer at Davenport, Iowa, was arrested on June 22, at the instance of the Cincinnati grain firm of McGuire & Co. Bryan is charged with shipping barley to the former since December, and drawing upon them for larger sums than was customary. On June 7, it is alleged, Bryan shipped two carloads of barley to McGuire & Co., writing them that each car contained 28,000 pounds of a certain good grade of barley, and drew on them for \$500, which draft was paid. The freight was prepaid. When the barley reached Cincinnati it was found that the cars contained only 7,000 pounds each, and of a grade below sample, and the firm sold the lot for \$275. They wrote for a settlement, but could get no satisfaction. Bryan waived an examination and was held in \$1,500 bond.

Returns from the wheat harvest in Kentucky and Tennessee are disappointing. The yield in Tennessee is said to be smaller than had been anticipated—not exceeding six to seven bushels per acre. The character of the grain is also poor. Rust was very extensive, and considerable loss was sustained by cutting prematurely, in order to protect the grain from further damage. This grain is naturally tough, and more or less shriveled. West Tennessee is reported somewhat more favorably. In the southern half of Kentucky there is also much damage from rust, with a disappointing yield in point of quantity. The northern half of the state probably has a good average grain, but the yield of the state will not amount to nine bushels per acre, the yield last year

being fourteen bushels. The crop will probably not exceed 10,000,000 bushels, the accredited yield last year being 17,500,000 bushels. Rust is reported here and there in Southern Illinois. The yield of that state is estimated at 16,000,000 bushels, which is 40,000,000 less than in 1880. Higher estimates of yield are being published, but there is no apparent ground for anticipating a yield of winter and spring wheat combined amounting to 400,000,000 bushels. The surplus stocks of old wheat and flour are probably twenty-five or thirty million bushels greater than a year ago, when they were abnormally light, and English stocks are also large, so that farmers have the double disadvantage this year of a small yield, and of a well-stocked and indifferent market. The crop is small, but if they sell freely, prices will be against them for the present. As to other staple crops, the absence of complaint argues that there are no grounds of complaint, though the weather has been too cool for the season.

The *Commercial Gazette* of Leavenworth, Kan., says that two more large public elevators would find profitable employment in that city, as a large amount of grain that now goes in other directions would come there if the handling facilities were adequate. The Kansas Central Elevator, owned by Messrs. Snyder & Denton, old and experienced grain merchants from the East, is the only public elevator in the city. It has a capacity of 116,000 bushels, and its daily receipts at the present are 15,000 bushels, and shipments about the same. The house, in all its appointments for handling, storing and cleaning grain, ranks among the best in the state, and is kept running night and day, employing twenty men. One or two more such establishments, says the *Gazette*, would soon give Leavenworth the position she is entitled to, of the chief grain market of Kansas.

Messrs. Cain Bros. have long been identified with the milling interests of Atchison, Kan., having amassed a snug fortune by the operation of a large grain elevator, and as elevator men generally drift into the milling business, these gentlemen formed no exception to the rule, but decided about a month ago to build the finest 200-barrel roller mill in the West, and no expense was to have been spared to bring about the desired result. The proprietors awarded the contract to Nordyke & Marmon Co. of Indianapolis, Ind. The mill is of pressed brick and carved stone trimmings, iron posts and girders inside, every part finished in handsome style. There will be twenty-eight pairs of rolls, twenty-four reels, seven purifiers, aspirators, centrifugals, and dust collectors. A 300 horse-power Cummer automatic engine will be built to drive the machinery. Nordyke & Marmon Co. will also set the mill up in building and start it into successful operation.

The Lenham Elevator & Lumber Co., with a paid up capital of \$500,000, obtained its charter about the middle of June. Its principal office is at Sanborn, Minn. Their charter permits them to build elevators anywhere in the state, but they intend at present to limit themselves to the line of the Sanborn, Cooperstown & Turtle Mountain Railroad, and have already made arrangements for shipping lumber and machinery from Minneapolis for elevators at Sanborn, Boothtown, Hanaford and Cooperstown, which they expect to complete in time for this year's crop. These elevators will have a capacity of 30,000 bushels each. This undertaking will supply the needs of large numbers of grain growers to the north, now greatly delayed in getting their grain to market, and is in competition with the N. P. or Minneapolis elevators, and will greatly benefit the wheat trade of Duluth. Mr. M. J. Davis, for the past year with Mr. A. J. Sawyer of Sanborn, will be connected with this company after Aug. 1.

It is a noticeable fact that about six in every ten of the entries of public lands this year have been made in the Territory of Dakota. Reports from that part of the country indicate that within another year very nearly all of the agricultural lands east of the Missouri River will have been taken up by actual settlers. The reasons for this general tendency toward the Dakota country are not generally understood. In spite of climate disadvantages which make some parts of the Territory disagreeable as places of residence, the Territory is irresistibly attractive to those who want the best and most reliable fields for grain growing. The soil is a rich loam many feet in depth, lying upon a bed of hard clay, which is almost waterproof. During the winter the weather is a constant variation from frost to thaw, so that by spring the soil is filled with a moisture so abundant that wheat will grow and flourish upon it independent of rainfall. Such a thing as a wheat failure has never been known in that part of the country, though frequently since settlement began the summers have been excessively hot and dry. The yield moreover, is always large, and most of the farmers after a few seasons, have so far prospered that they have been able to hold their grain for a high market. These things have served to draw the bulk of immigration that way in a ratio that is increasing so fast that within a very few months only the low grounds and barren spots, which are few, will remain unsettled. Then will come the cutting up of those vast farms which a few years ago astonished the world by their extent and their extraordinary productiveness. These farms served their purpose in advertising the territory while yet it was young. Their owners will scarce be able to resist the opportunities that must shortly be offered them to sell at prices which will yield them fabulous profits. The next report of the general land office will show that more than two-thirds of all the sales to actual settlers on the public domain this spring and summer have been in the wheat lands of Dakota.



## Canals and Marine.

In the month of June 31,503 tons of corn went through the Erie Canal.

Messrs. Manning, McDonald & Co. have been awarded the contract for the construction of the Tay Canal in Canada.

The Quebec Harbor Commissioners have received an application for a site for a grain elevator on the Princess Louise embankment.

The Buffalo grain trimmers have made a special rate for trimming grain in the steamer Nyack because of her peculiar hatches. Hereafter they will ask \$6 per 1,000 bushels for the men's work, and \$2 in addition if the steam shovel is used.

The Washington Canal Improvement Co. of Seattle, W. T., have accepted the bid of Cummings & Co. who have contracted for the entire construction of both canals, and will commence work immediately with a large force and ample funds. When completed, this will make 100 miles of new water front.

The retiring president of the New York Produce Exchange in recent comments said that, in order to preserve the commercial supremacy of New York, the Erie canal must be enlarged to twice its present capacity. More elevator facilities were needed, also more storage facilities for flour and provisions.

Canada's grain export for 1882 fell off nearly 2,000,000 bushels compared with the previous year, and upward of 4,000,000 bushels compared with 1880. The duty collected on grain and flour imports last year shows a decrease of \$7,000, while the actual quantity of grain entered for consumption in the Dominion increased by 40,000 bushels.

The beneficial effect of freeing the New York Canals from tolls is already evident in their large increase of transportation. For the week ending June 7, there were 23,454 tons of wheat, and 36,697 tons of corn shipped by canals, against 11,597 tons of wheat, and 9,579 tons of corn during the same period of 1882. A total of 199,902 tons of merchandise were transported this year against 154,402 tons in the corresponding week of 1882.

Only a few years ago no lake vessel had ever carried 100,000 bushels of grain, and when the iron propeller, Java, managed to take 100,000 bushels of oats from Chicago to Buffalo the feat was hailed as a notable one, which marked a new era in our inland commerce. Now the great steamship, Onoko, built in Cleveland last year, has landed a cargo of 160,500 bushels of oats at Buffalo, and, with some changes in her hold, the huge ship could undoubtedly carry a few thousand bushels more. The commerce of the lakes is yet in its infancy.

The Kingston News says: "Belleville is getting ambitious. Next week the first through shipment of grain from the West—about 60,000 bushels—via Belleville, will be made to Montreal. Barges will be sent to Belleville, where they will be loaded and then towed down the river. Downey & Preston's elevator will be used in shipping the grain, which will arrive at Belleville on the Midland Railway." When the missing link is completed, the above will only be a drop in the bucket to what will then be shipped from here.—*Belleville Intelligencer*.

The Salvage Corps of New Orleans, La., has attained an unenviable notoriety for its exorbitant charges. The bills presented to the underwriters recently for lighterage, tonnage, etc., in the case of the British steamship "City of Lincoln," that had grounded with a cargo of grain and cotton while clearing the port, amounted to \$80,000. Some of the items are as follows: "For the use of barges for lightering, \$100 per day; for towage of a lighter to the jetties, \$1,700; for each towboat \$100 per hour, and for the use of each hawser \$25 each time used."

"New Orleans, as we have shown," remarks the *Times-Democrat*, "is now the second grain exporting port of the Union. This business still continues brisk and lively, and promises to remain so the entire summer. For the past month the exports were 1,317,549 bushels, and for the entire season the receipts from the interior have been 11,732,250 bushels, against 3,640,465 bushels last year, an increase of 218 per cent. In fine, our receipts of produce from the West, so far, have amounted to 460,000 tons, a very handsome increase of past years. There is, moreover, every prospect that this business will continue to a much later day than usual this summer in consequence of the present high condition of the river, which is assured us for weeks to come. There is, indeed, every reason to hope that this river route will not be closed at all to boats and barges, this year, by low water."

A supplement to the report of the Commissioner of Inland Revenues in Canada has just been issued, giving the canal statistics for the navigation season of 1882. The statistics for the previous year are printed with the annual report of the Department, and comparing them with those now submitted it is found that the aggregate revenue from canals in 1882 has increased by \$17,413. The increases have been on the Welland Canal \$26,687, Chambly Canal \$3,302, Rideau Canal \$934, Ottawa Canals \$5,411, Newcastle district canals \$113. The receipts from the following show a decrease: St. Lawrence Canals \$17,557, Burlington Bay Canal \$828, St. Peter's Canal \$649. Total increase, \$36,448, total decrease, \$19,035. The total number of grain laden vessels lightened at Port Colborne in 1882 was eight, against 133 in the

previous year. Only one vessel entered the canal unladen, against 22 in 1881. A reference to the statistics of the State of New York shows that the proportion of freight carried by the canals of that state has been steadily declining. In 1859 68.9 per cent. of the total freight was carried by canals, while in 1881 the proportion was 18.5, and in 1882, 19. The total freight tonnage carried by New York canals in 1882 was 1,882,543, compared with 1,827,287 in 1881. The quantity of grain carried through the Welland Canal last year was 306,482 tons, while the tonnage of heavy goods reached 282,984. In 1881 the figures were 269,395 tons of grain and 189,188 tons of heavy goods. The quantity of grain passing through this canal in transit between ports in the United States was 64,002 tons in 1882, and 65,285 in 1881.

The Harbor Commission of Toronto, Ont., have decided to make a cut through the marsh to the lake from the mouth of the Don River, for the purpose of stopping the large amount of mud brought into the bay by spring freshets. The cut will be 100 feet wide at top, and 80 feet at bottom, with 10 feet depth, and 11,000 feet of dredging will be required. No piling, it is thought, will be needed, as the fresher water will keep the channel scoured. A lock-gate will be placed on the west side, at the present bend of the river, to prevent the mud at certain periods finding its way to the bay. This is considered by civil engineers and business men only the beginning of the Toronto harbor improvements, and it is predicted that when the river is straightened and made navigable, extensive warehouses will be built on both sides. The contract has been advertised and the work will commence as soon as it is awarded.

The Minister of Public Works, in Canada, in his annual report for the year 1881-2 gives a summary of the expenses of the Canadian canals from their commencement to July 1, 1883. There are seven classified systems, of which the St. Lawrence Canal system is by far the most important, and comprises nearly all the large canals of Canada. The Montreal, Ottawa and Kingston system is next in importance. Immense expense has been incurred in increasing the general depth of the channels, and especially of harbors. Vessels drawing seven feet can now pass through these canals; the Welland is being dredged to a uniform depth of fourteen feet. The total cost of these canals, up to July 1, 1883, amounts to \$48,410,983, of which sum the various governments expended nearly \$19,000,000 prior to the confederation; about \$6,500,000 was at this period expended from other sources. Since the confederation the expenses have been distributed among the provinces. The expenditures for repairs, etc., during the latter period amount to \$5,239,257, making the total of the Canadian canals, for fifteen years, \$28,686,821.

*Bradstreet's* does not take a very enthusiastic view of the increase of business on the New York canals, owing to making them free. It says: "Our correspondent at Buffalo, in a letter which will be found in another column, shows that while the abolition of tolls has been an important factor in the increase of the business of the Erie Canal, it is yet too soon to determine just how important it has been, and that other causes also contributed in a considerable degree. He points out that the business of the canal has been proportionally better this year since the opening of navigation than it was during the same time last year, but he also directs attention to the fact that the canal did an even more active business in May, 1880, than in May of this year. The difference between the amount of transportation through the canal thus far during the present year and that for the same period last year he attributes in part to the fact that the railroads last year were in active competition with each other, and that by reducing rates to a point that did not pay for transportation, they took considerable business from the canals, whereas this year the roads are in better agreement, and maintain a living rate."

There can be little doubt that the removal of tolls on the Erie Canal has done much to injure Canadian commerce, as the amount of grain shipped to the seaboard through the canal thus far this season has been enormous, and far in excess of the same length of time for a number of years. On the other hand, Canadian shipments have been disproportionately small, and there is a considerable amount of grumbling and discontent manifested among Canadian vessel-owners. The vast amount of grain and produce that has in former years been shipped direct to Kingston, Toronto, and Montreal has been gradually falling off, until now the number of Canadian clearances from this port have narrowed down to almost comparatively nothingness. For this condition of affairs the vessel men can blame no one but their own Government, as the excessive tolls exacted from vessels passing through the Welland Canal renders competition almost impossible. The present rate of tolls on cargoes is twenty cents per ton and an additional toll of two and a half cents per ton on the registered tonnage of vessels. Added to this is the cost of lighterage and the heavy towing charges. An attempt is being made to have the toll system abolished, thereby reducing the cost of transportation, and in the event of this being done there would undoubtedly be a large increase in lake traffic on Lake Ontario. Regarding the present condition of marine affairs at Toronto the *Mail* says: "Instead of any brightening prospect in marine circles the depressing aspect of things has become general. As the season advances matters appear to be getting duller, and if this state of affairs continues much longer there will be no need for a harbor, and the officials connected therewith, instead of being hard-worked, will be happy in the possession of a sinecure office. Some five weeks ago a deadlock in coal occurred, but in the course of a few

days shipment were plenty in this class of freight, and there was a prospect of a busy season opening. But again there was a cessation, and now there is as great a want of coal consignments as ever. Shippers at this port are at a loss to account for the depression, and it seems strange that, while there are active and extensive marine operations in the other lake ports, Toronto should, of all others, be comparatively idle. There have not been two dozen arrivals, outside the mail steamers, since the opening of the week, and advices do not point to any increase of business."

The Buffalo *Courier* reports the movements of flour and grain at that place for the month of June and since the opening of navigation. The receipts by lake in June were 271,370 bbls. flour and 8,382,570 bus. of grain, as against 277,180 bbls. flour and 6,148,860 bus. grain in June, 1882. The shipments by canal in this same time were 436 bbls. flour and 5,832,996 bus. grain, against 531 bbls. and 2,871,112 bus. grain in June, 1882. Since the opening of navigation, which began a month later than last year, the receipts by lake were 505,750 bbls. flour and 17,794,600 bush. grain, against 584,700 bbls. flour and 15,919,540 bush. grain to the first of July, 1882; while the shipments by canal since the opening of navigation were 1,202 bbls. flour and 12,584,527 bus. grain, against 2,273 bbls. flour and 9,011,861 bus. grain in 1882. It appears, therefore, that in the present short season since the opening of navigation both the receipts and shipments of grain have been considerably larger than last year, when the season to the first of July was a month longer. The receipts of grain were nearly two million bushels more, and the shipments by canal about three and a half million bushels more. This large comparative movement has been stimulated by the removal of tolls from the canals.

One of the largest grain vessels that has as yet come to this port reached Kingston yesterday. She is the steam barge, D. C. Whitney, from Chicago, and her cargo is 61,000 bushels of corn. She can carry 75,000 bushels. Capt. July of Alexandria Bay, her commander, states that he like this route first-rate, and that he will endeavor to come this way again. The Whitney is accompanied by a consort carrying 49,000 bushels, making the aggregate 110,000 bushels; value over \$50,000. The Whitney was built in Detroit in 1882 by Mr. D. Whitney, at a cost of \$97,000. She is 256 feet long, and has a 41-foot beam. She has two compound engines, with a 44 and a 47-inch cylinder respectively, on one shaft. She is so complete that sixteen hands (the same number as is on an ordinary propeller) is quite sufficient to man her with ease. With her present cargo she draws 14 feet 2 inches forward, and 14 feet 5 inches aft. At Port Colborne she lightened 23,000 bushels, but she lightened more than she would have done had not the recent gale lowered the water in the canal. The Whitney is an excellent craft, and many visitors have been shown over her by the genial and courteous captain. Her machinery is a grand sight. The captain of the Whitney was told that he should charge twenty-five cents per head before allowing people to board her. If he did he would make money, as about 300 inspected her at the M. T. Co.'s wharf here.—*Kingston News*.

### THE GRAIN WEIGHING LAW.

The grain weighing law, recently passed in this State, has been this week a subject of much interest. It provides that the state railroad commissioners shall appoint the weighmasters, who shall have control and supervision of the weighing of grain by the railways, and whose certificates shall be final and conclusive to all parties concerned. If the spirit of this law were carried out the shippers and carriers would alike benefit. There is much need of better methods of fixing the weights of grain, and the railways would doubtless be glad to be relieved of responsibility in this matter. But the new law is unfortunately susceptible of varied interpretations. It apparently conflicts with the weighing law of 1871, which does not appear to be repealed; then again it may prove difficult to obtain the acquiescence of Eastern receivers to certificates issued by local authorities here; and the right of state officials to control weights of grain destined to points without the state, might be questioned on constitutional grounds. These with various other objections to the law have caused the railway commissioners, who have the appointing of the weighmasters, no little tribulation.—*Railway Gazette*.

THE CONDITION OF THE MARKETS.—"Ah, good morning, McGouse, you're just the man I want to see," said old Put-in; "how's the market going to be?" "I'll tell you, as a friend, everything is going to boom. This little flurry will be over in a few days, and then things are going up. I tell you, old fellow, now is the time to put in." "But Snide, your partner, says the bottom is dropping out of everything." "Snide! Ah, Snide is the bear member of the firm."—*Hartford Post*.

MARGINS EXHAUSTED AND DEAL CLOSED.—A youth who had for two or three years been paying his addresses to a \$20,000 Brooklyn girl discovered the other day that there was a rival in the field. He thereupon sat down and wrote: "Darling, I have advanced over \$300 margins and can do no more. How does the deal stand?" The next day brought him an answer which read: "Margins exhausted and deal closed. Better invest in a \$5,000 girl."



## Notes from the Exchanges.

At the New York Produce Exchange the other day it was reported that a certificate had been sold for \$4,500, the highest price yet reached. At the Mercantile Exchange \$170 was bid and \$180 asked.

At a late meeting of the grain trade of the New York Produce Exchange, on motion, it was agreed that any corn grading No. 2 arriving at the port of New York, whether it be old or new, shall be a good delivery on any contract for No. 2 corn of this year.

The receiver appointed in the affairs of McGeoch, Everingham & Co., Chicago, reports liabilities to members of the Board or Trade, after deducting offsets, at \$1,195,000; to banks, \$3,950,000, against which the lard held is estimated to cover \$3,800,000, leaving a deficit of \$150,000—total of net liabilities \$1,345,000. Country accounts, it is assumed, will balance themselves. The receiver has \$200,000 of cash assets, and Mr. McGeoch proposes to raise \$450,000 additionally, and to pay 50 cents on the dollar of obligations.

The tower over the new Produce Exchange, New York, will be one of the finest points of view in the city. Not only will it be among the highest of lofty structures, but its situation, near the Battery, will give sight-seers a view of the bay. It towers already above all the buildings in the lower part of the city, with a few exceptions, and fifty feet have yet to be added to bring it to its height of 235 feet. The workmen are busy on it, the material being sent up to them by a hoist, while they go up by long ladders.

At a recent meeting of the Minneapolis Board of Trade the following officers and boards were elected for the ensuing year: President, F. V. Heyderstadt; vice-presidents, W. H. Hubbard and John McCauley; secretary, L. A. Gilbert; treasurer, Wm. Dawson; board of directors, W. A. Van Slyke, D. Schlutte, Frank Sterritt, J. W. Jagger and W. G. Gates; board of arbitrators, H. P. Grant, J. M. Bohrer, J. B. Hoxsie, P. Engels and J. W. Doran; board of appeals, C. McIlrath, J. A. Hawkins, A. L. Larpenier, J. C. Harper and Julius Austrian; inspector, W. H. Ritter.

There were lively times on the New York Produce Exchange on June 19, the day's transactions in grain being heavier than ever before, fully 17,500,000 bushels of wheat changing hands. A million and a half of this was sold at the first call, an unprecedented amount in that market to be sold under the hammer. Of the total transactions, about 200,000 bushels were sold for June delivery, 4,000,000 for July, 4,000,000 for August, 6,000,000 for September, 3,000,000 for October, and 348,000 for November. Corn also showed much activity, over 3,000,000 bushels being sold. The value of the wheat that changed hands amounted to about \$21,000,000.

Says the *Toronto Globe*: The amalgamation of the Board of Trade and Corn Exchange is a circumstance upon which the business community is to be congratulated. The opinions of the larger body will have more weight than the combined separate opinions of the two smaller bodies. The only trouble with the new body seems to be the selection of a name. Neither the Board of Trade nor the Corn Exchange seem to relish the idea of losing its name as well as its identity. It really does not matter by what name the new body is known. The public will judge it on its merits. Mr. Darling's suggestion, "Chamber of Commerce," is a good one, but all things considered, the shorter the name the better.

The produce and grain exchanges of New York, Chicago and Milwaukee alone could in a very few months, if their members were so disposed, reduce all dealings in those lines within safe and strictly legitimate limits. As the country grows, and the amount of capital and energy engaged in actual trade, as opposed to mere gambling increases, it is probable that such limitations will gradually become stronger. At first the tendency is the other way, but it ultimately changes, and sober minded men, who hope to see the vast commerce of the country rid of the disturbing influence of such adventurers as McGeoch, will have to trust to this reaction, and, in the meantime, aid it as much as possible by their example and influence.—*N. Y. Herald*.

The first annual excursion of the St. Louis Merchants' Exchange Benevolent Society, which was a grand family picnic, taking the little people as well as their elders, took place on June 16. Three large barges, magnificently and appropriately fitted up for the three classes of human freight, in their various amusements of Punch and Judy, dancing, promenades, etc., carrying an estimated aggregate of some 2,500 individuals, were towed down by the steamer "Future City" to the vicinity of Montessand, where ball and croquet grounds, and race tracks for human contestants, with music of fine bands and grand male choruses furnished abundance of amusement for all, while overflowing lunch baskets amply supplied the power. Some 200 graver citizens found their way there by rail later in the day. The weather was perfect, and the return trip was made brilliant by the barges being illuminated with electric lights.

The new Board of Trade Building at the foot of La Salle street, in this city, is growing perceptibly each day, and gives evidence of a fulfillment of the promise to have it under roof by the time snow flies again. The granite work on the three principal sides and the enameled brick wall on the south have reached the top of the second story, and workmen are now engaged in erecting the scaffolding which will be used in constructing the

ceiling of the main 'Change hall. This is of more importance than the casual observer would suppose. When completed it will be eighty feet high, beginning at the top of the second story, and will of necessity be of a most substantial character. The immense carved and polished granite pieces bearing the name "Board of Trade," have arrived from the quarry, and they will be put in place within a few days. There is now plenty of material on hand, and there will be no delay in the work, at least not for some time.

At Winnipeg, Manitoba, on June 13 a meeting of grain and produce merchants was held in Mr. Geo. J. Moulson's office, the object being to form a Winnipeg Grain and Provision Exchange. The provisional officers elected consist as follows: President, D. H. McMillan; vice-president, Kenneth MacKenzie; secretary-treasurer, Geo. J. Moulson, together with the following Board of Provisional Directors—Messrs. N. Bawlf, A. Douglas, R. R. Keith, Wm. Clark, W. H. Brown, H. Bose and Mr. Hastings. These were instructed to secure as soon as possible information, to draft by-laws, and report at another meeting. In addition to the names already given, the following were proposed as original members of the association: W. W. McMillan, H. S. Masterman, James Andersen (H. B. Company), James Riddell (R. R. Keith & Co.), Andrew Strang, James A. Mitchell (Portage la Prairie), A. P. Campbell (Portage Milling Company), W. B. Shaw, W. F. Henderson, J. A. K. Drummond (High Bluff), D. G. McBean, A. Armitage, S. K. Clarke, J. A. McNabb and L. McLean.

### WINNIPEG GRAIN STORAGE.

The question of a system of grain elevators in Winnipeg for the storage of Northwestern grain, which has been on several occasions during the past six months advocated by *The Commercial*, seems at last to have forced its importance upon the daily press of this city. *The Times* of last Tuesday contains the following article on the subject: If Winnipeg is ever to be made a great city, elevators must be built. At present wheat is sold here in the market or at the mill in the primitive fashion. Two years hence the yield of wheat in the Northwest will have reached formidable proportions. During the season of navigation it will find its way to the seaboard via Port Arthur, but for at least six months in the year there can be no outlet there. It must then be stored somewhere for shipment to Chicago, and Winnipeg is the natural point. An elevator of the capacity of a million bushels could be erected for, at the outside, \$200,000. Wheat is generally higher at Chicago during the winter than during the summer months, and in that season Winnipeg could do a good trade. If wheat were worth \$1 per bushel, the storage of a million bushels here would represent a million dollars. It is not money locked up. When a grain-buyer buys the farmer's load and puts it in the elevator, the banks are quite willing to advance him seventy-five per cent. of its value on the warehouse receipt, and with this he is enabled to keep on purchasing. His purchases, in fact, become the security for further advances and other purchases. In this way an enormous sum of money is kept in circulation, the good effects of which are felt in every branch of trade. When the grain-buyer sells, say to Chicago, he draws for the full amount on the strength of the bill of lading, the draft being credited in the bank against the amount advanced him on the warehouse receipt. Then he goes to work again. Storage costs a cent per bushel per month, or, including insurance, a cent and an eighth. This soon pays for the elevator. No. 1 hard, the Fyfe wheat grown in the Northwest, is worth five cents per bushel more than No. 2 Chicago.

In a few years every station along the C. P. R. will have either a warehouse or an elevator, and Winnipeg should lose no time in making itself the great reservoir of so much wealth.

The *Free Press* of the same date also contains a well-reasoned article on the same subject, which appeals strongly to the financial and commercial classes generally. On the question of profit from such an investment the article concludes with the following paragraph: From the capitalist's standpoint the investment of money in such an enterprise as this seems to promise exceedingly well. His object is, of course, to secure a fair return for his capital invested, and no other scheme affords a better prospect now than the building of elevators. If the profits from storage are not likely to yield a handsome dividend, then there can be no money whatever in the Northwestern grain trade, and consequently not a good prospect for the Northwest itself. The enterprise, in short, is just as sure of success as the country itself, and this cannot be said of every enterprise in which capital is embarked. Since the community and the capitalists who build the elevators are sure to profit by their establishment, there should be no hesitation in at once commencing their construction.

It may be added that in Chicago, Milwaukee, St. Louis and all other grain centers of the Western United States, storage elevators have proved remunerative investments, and some railway companies who own and operate their own find them a great source of profit, while others can rent them to reliable parties to operate, and secure in rental a heavy return on the money invested.—*The Commercial* (Winnipeg).

Another Eastern outlet is talked of, for the Indiana, Bloomington & Western, that company having offered \$3,000,000 for the Cleveland, Columbus & Mount Vernon road—a connection and traffic arrangement with the Nickel Plate will be sought.

## Fires, Casualties, Etc.

A. B. Gregory, grain broker at Indianapolis, is dead.

T. W. Stoll's warehouse at Fairfield, Wayne Co., Ill., was burned July 9.

An overloaded grain warehouse at Yankton, Dak., fell the other day, letting out 3,000 bushels of grain.

The burned village of Evansville, Minn., had three elevators, with an aggregate capacity of 180,000 bushels.

S. P. Merrill, grain and produce dealer at Earlville, Ohio, has recently met with loss by fire, estimated at \$10,000.

E. F. Branch & Bro., grain dealers at Martinsville, Ind., were burned out, recently, with a loss of \$20,000; insurance \$16,000.

Two warehouses belonging to R. N. Sawyer at Ossian, Winneshiek Co., Iowa, were burned recently. Loss, \$3,000; no insurance.

The *Chronicle* reports five elevators and three grain warehouses burned in the United States and Canada during the month of April.

A severe fire at Astoria, Ore., recently destroyed \$225,000 worth of property. The Oregon Railway & Navigation Co.'s loss was \$75,000.

On July 6 two grain elevators at Clyde, Ohio, owned by Hunter & Wilcox, were destroyed by fire. The loss was partially covered by insurance.

On July 12, the warehouse of Meigher Bros. at Perth, Ont., was completely gutted by fire. The loss to the building, which was of stone, was slight.

H. W. Sprague, who was recently bound over at Benton, Dak., for setting fire to an elevator, has been lodged in jail for forgery, in default of \$1,200 bail.

The warehouse of Fox, Scott & Co. and that of Wm. Grant at Grant's Station, Ore., was recently destroyed by fire. The loss on both warehouses was \$40,000.

The elevator of Hallam & Reed at Ida Grove, Iowa, was struck by lightning during a severe thunder storm on the afternoon of June 17. Damage was very slight.

The grain elevator of Cooper & Augustine at Cooper, Tazewell Co., Ill., together with 5,000 bushels of grain, was burned Sunday night, July 8. Loss, above insurance, \$6,000.

Percy, a ten-year-old daughter of Silas Jeffers of Shelbyville, Ind., was recently smothered to death by playfully jumping into a grain bin, as the wheat was running out into cars.

Smith & Porter, grain dealers at Freeport, Ill., lost about \$7,500 by a fire at Ridott, a small village near by, on the night of June 14. Their large elevator and two warehouses were destroyed. Insurance, \$5,300.

The grain elevator at Allison, Iowa, belonging to the Dubuque & Dakota R. R., and operated by James Dobbins, has been burned with all the grain and machinery. The fire caught in the top of the building. Loss, between \$5,000 and \$6,000.

About 8 A. M., on June 15, Gus Anderson, a laborer employed at the Milwaukee & St. Paul Elevator, Chicago, Ill., while stepping over a shaft had his clothing caught in the belting, and was turned over the shaft several times. Though badly bruised, there were no bones broken. He was taken to the hospital.

The three-story frame elevator belonging to David Grubb, situated at Waldron, seven miles east of Shelbyville, Ind., was burned by an incendiary fire on the night of June 20. The loss on the building was \$5,000; insured for \$4,000. There were 8,000 bushels of wheat in the building, insured for \$6,000. The elevator will be rebuilt at once.

A fire occurred in the grain elevator of Bassett, Hunting & Co., McGregor, Iowa, early on the morning of June 23, completely destroying it with its contents. The loss was \$75,000; fully insured. The fire also damaged the elevator and corn cribs of Gilchrist & Co., who had several thousand bushels of grain on hand, and their loss was about \$5,000; fully insured.

### HOW THE JAPANESE DEAL WITH SPECULATORS.

The Japanese have a short and easy way of dealing with stock exchange speculators. It was recently resolved to arrest at the same moment all offenders on the stock exchanges at Osaka, Yokohama and Kobe, as well as on the rice exchanges of Tokio, Otsu, and other important commercial centers. The police inspectors received their orders only on the morning of the day fixed, and strong detachments of constables—all wearing various disguises—then proceeded to the vicinity of the exchanges and mingled with the crowd so as to avoid observation. A few minutes after 11 all was in readiness. Six detectives stationed inside sounded their whistles, and before the amazed speculators realized what was the matter, the exchanges were in the occupation of the police, the doors locked, and the prisoners secured. All the books, records and papers were then taken possession of, and the whole "haul" was removed in boats to the central police station. It is stated that the offense with which these men are charged is speculating in "margins." Over 700 delinquents were put in prison. A month of this kind of thing in New York or Chicago—and—well, what would become of us?—*N. O. Picayune*.



# THE AMERICAN ELEVATOR AND GRAIN TRADE.

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## ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching this trade. Advertising rates made known upon application.

## CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

## THE ILLINOIS GRAIN INSPECTION BILL.

The failure of the "Grain Inspection Bill" to become a law, after having passed the lower house of the Illinois Legislature by a vote of ninety-three to twenty-two, was due to its detention in the hands of the Chairman of the Senate Warehouse Committee, Hon. W. E. Mason of Cook county, as is openly charged, for this special purpose. The bill, on being called for by the Senate, was handed to Senator Bridges, chairman of the sub-committee, who failed to appear and present it to that body until too late for action previous to adjournment. The interests of the St. Louis Merchants' Exchange were deeply involved in this bill, whose object was to take from their control the grain inspection of East St. Louis, and place it under that of the state, in accordance with the statutes of Illinois. The intimate relations of the two cities in business and ownership of capital has hitherto placed the local government of the Illinois town in the hands of the powerful city opposite, while the erection of the great bridge over the Mississippi has strengthened immensely these common bonds. A special committee of the Illinois Legislature has for months been engaged in a careful investigation of the complaints made by the citizens of our state engaged in the grain trade there, and the arguments pro and con in regard to this anomalous inspection control. The bill was the result of their labors and undoubtedly represents the views of the great majority of the citizens of Illinois.

## THE CHICAGO GRAIN INSPECTORSHIP.

The term of office of P. Bird Price, Chief Inspector of Grain at Chicago, Ill., expired July 1. He was appointed by Gov. Cullom in September, last year, to fill the unexpired term of Jno. P. Reynolds. The reappointment of Mr. Price is improbable, although the office seems to have been admirably managed and to the general satisfaction of those interested in the grain trade, especially the receivers and shippers, who are very outspoken in his favor, and deprecate any change which would lower the standard of inspection. The injury to the grain trade of Milwaukee from this cause has been particularly referred to. Mr. Price states that the Governor intimated that he would re-appoint him if he would replace his cashier, Mr. Trayer, a brother-in-law of Mr. Price, with a gentleman of the Governor's selection. This was declined on the ground that the office was now well and satisfactorily filled, and as the Inspector is held in bonds amounting to \$150,000, it is of the utmost importance to have a money custodian in whom he and his sureties have per-

fect confidence. Mr. Price considers it a political matter, and the public press seem to largely take the same view. Gov. Hamilton has been freely interviewed, and charges Mr. Price with being an obstruction to economy in managing the Department; that he was opposed to the cutting down of salaries, and a decrease in the number of employes. The Governor denies, indignantly, that he desires to make the office a political one. Mr. Price admits his opposition to a reduction of inspectors' salaries, on the ground that reliable inspectorship requires skill and years of experience, and competent inspectors cannot be retained or had at reduced wages. He also opposes the decrease of the number of track inspectors as injurious to the interests of grain receivers, who want certificates as early as possible, so that the grain can be sold on the same day. In connection with the political aspect of the matter, it is stated that there is also a desire to remove J. Howard Jones, chief clerk in Mr. Price's office, and recognized by the receivers as a valuable man, competent to fill the place of Chief Inspector. Gov. Hamilton, at present writing, is reticent as to his action; it will be jealously watched by all interested in grain, and the reform of the civil service.

## A POSSIBLE WHEAT PANIC IN ENGLAND.

Some suggestions have been made by the *Chicago Tribune* relative to the possible effects upon the wheat supply of the British markets from India, of the recent outbreak in Egypt of Asiatic cholera. The disease seems so far not to have been checked, and a blockade of the Suez Canal is announced as necessary to a proper quarantine against the infected districts. If this blockade be deemed essential, and be maintained, its practical effect must be to cut Great Britain off from the Indian wheat, already bought by dealers. The India surplus of wheat has been estimated at from 30,000,000 to 50,000,000 bushels, and it has already been stored at the Indian ports, where, under such a state of the canal, it will remain "and rot." Only an excessive price for the wheat of other countries would permit a profitable shipment of the wheat of India via the Cape, the only other route, as the time required by sailing vessels would be three months, while steamers cannot carry the necessary amount of coal.

The opening of the Suez Canal made these wheat shipments from India to England practicable; our contemporary thinks that its closure will produce a panic among the English grain dealers, who have already invested millions in the purchase of this wheat. But, which is of more importance to us, it will create a much larger demand for American wheat in England than had been anticipated. Should the cholera spread, the ports of the Black Sea may also be blockaded, and to profitably send Odessa wheat via St. Petersburg, and rail to England, would require a still more exorbitant price. Although these considerations improve the prospect of the American grain trade, it would be a great mistake to speculate heavily upon them. The plague may yet be checked and the canal be re-opened in time for this traffic. The consumers dependent on the English markets, should unreasonable prices be asked for wheat, and bread become dear, will obtain their food supply from other cereals and food products, and leave in the lurch speculators who may endeavor to enrich themselves by taking advantage of necessities so calamitously produced.

THE question of the eligibility of Sen. Torrence to the position of Illinois State Weighmaster, to which he has just been appointed, rests upon a clause of the State Constitution, prohibiting any one holding any lucrative office under the United States, or this state, or any foreign government, from having a seat in the General Assembly. Some offices, paid by fees, as Notary Publics, etc., are not considered technically "lucrative." The weighmaster has a salary which is, however, derived from fees. This plea has been made, but seems like a quibble. Sen. Torrence's seat in the Senate will be vacant in January, 1885, and he says, unless an extra session be

called, is practically vacant now. An eminent lawyer is reputed to have said, "He cannot serve as Senator and State Weighmaster, and before accepting the latter position should have resigned as State Senator, which office is one both of honor and profit."

## FUTURE DELIVERY.

The sale of commodities for future delivery is a continually increasing feature of mercantile transactions, being more largely required as commerce becomes more extended. Time, when the vast distances for transportation are considered, and the varying periods for obtaining the products demanded, will as those of the market requirements is of the utmost importance, especially in dealing in grain, whose contingencies of production are so great. These transactions require careful calculations long in advance of the actual need for use of the grain, and sellers who seldom have on hand the grain contracted for, require, as far as practicable, the option as to time of delivery. Experience in dealings on Boards of Trade has made the optional period of delivery the whole month in which the seller contracts to deliver from the first day to the closing hour of business on 'Change on the last day of the month; this is called "seller the month." The option to demand at any time during the month by the buyer the grain contracted for, called "buyer the month" is almost obsolete in practice. The importance and absolute necessity of these dealings in "futures" and their effect in benefiting the vast body of farmers scattered throughout the grain-growing regions of the world, as well as dealers and consumers, is perfectly evident. This option as to time, in legitimate trade, is frequently confounded with the so-called "dealings in options" of the "bucket shops" or the "puts" and "calls" of the speculators on the Call Board. In the latter cases no grain is intended to be handled in the transactions; they are simply bets on the variations of the market, under the form of sales. In the former the transactions always intend the transference of grain which can always be legally enforced or damages be obtained. When settled otherwise, for any contingent cause, it is by mutual consent of parties. It has been repeatedly asserted that the laws of Illinois forbade all dealings in futures. Various decisions of the Supreme Court of the state prove this to be an error of interpretation; we quote from a decision of the Court given in September, 1875: "Seller the month" [term here explained] is nothing more than a time contract, which is regarded on the Board of Trade and elsewhere as a legitimate regular contract. Time contracts in relation to grain, as well as other commodities, are of daily occurrence, and must necessarily exist in commercial transactions." In a more recent decision of the Illinois Supreme Court the statement is made that "the statutes do not prohibit a party from selling or buying grain for future delivery; such was the purpose of the statutes; nor can it make any difference as to the legality of the contract whether the party who sells for future delivery, at the time of the sale was made has on hand the grain, etc. \* \* \* It is true the defendant had the option to select a day within the limited time on which he would receive the grain, but such an option does not fall within the statutes, for the reason that it does not render the sale optional." There are no decisions of the Supreme Court that invalidate legitimate future sales on time contracts.

THE Chicago Open Board of Trade, failing by an injunction bill to get back the market quotations, of which they were deprived some months ago, filed a petition in court, on July 9, for a mandamus to compel the Western Union Telegraph Co. to furnish this information. The old averments are repeated, that the telegraph company is a common carrier, bound to make no discrimination, nor to withhold information as to the market quotations it collects and furnishes throughout the country. It has, however, done this by its refusal to furnish the Open Board with this information, and the latter ask for a mandamus to compel compliance.



## Editorial Mention.

WE have been shown some strong testimonials to the merits of the Harrison Conveyor for handling grain, malt, saw dust, etc.

R. M. KNIGHT & SONS, Philadelphia, Pa., write us: "We think your journal of great importance to the grain trade, and wish you success."

SANBORN & CO., Pecatonia, Ill., write: "We are well pleased with your paper for last year, and think it will be appreciated by grain men generally."

THE Continental works of T. F. Rowland, Brooklyn, N. Y., are steadily shipping large numbers of their Duc warehouse buckets all over the country.

THERE seems to be no doubt that Mr. Frank Drake, assessor for the South Town of Chicago, will be appointed to fill P. Bird Price's place as chief grain inspector at Chicago.

ATTENTION is directed to the advertisement of the Indiana Paint & Roofing Co. of New York and Indianapolis. All who have buildings to protect are interested in what they advertise.

IN Shelby county, Ind., three grain elevators have been burned by incendiary fires within three months, the last one being Grubb's Elevator at Waldron. The incendiary needs elevating to a limb of a tree.

E. G. DATESMAN of West Milton, Pa., writes us: "I have seen a copy of your AMERICAN ELEVATOR AND GRAIN TRADE, and I find it useful in my business. Inclosed find \$1 for one year's subscription." A model letter.

SEND for new enlarged engraved diagram of the Hinman Dump, to the Western Grain Dump Co., of Lincoln, Ill. We are informed that over one hundred and fifty towns and stations in Illinois have been sold for this dump.

MR. WATSON GRIFFIN says that so long as Canada has her protective tariff, Winnipeg will become and remain the "Chicago of the Northwest," controlling the handling of the products of the vast wheat fields to her west.

WE have tried several coats the past year, of various tints of blue and pearl color. Although we have not joined the Land League, we have settled upon the handsome green coat which we wear on this occasion, as one which will do for steady wear.

AT the annual convention of the Millers' National Association held in this city on June 26-27, diligent inquiry developed the fact that wheat is in better shape, so far as as yield is concerned, than reported in our last issue. The crop will not be so very short, after all.

THE astute City Council of Chicago lately passed an ordinance imposing upon commission merchants a license fee of fifty dollars per year. There are eight hundred commission merchants in the city, and the tax would net the city \$40,000. But the commission men are inclined to be "sassy" about the matter, and only one firm, so far, has expressed a willingness to pay the assessment.

It will be seen from the announcement made elsewhere in this number that the Harrington & King Perforating Co. of this city, succeed Harrington & Oglesby Co. in the business of making perforated sheet metal for those numerous uses which a recent article in these columns showed sheet metal could be put to. Mr. Harrington has been identified for years with this business, and no doubt the new company will meet with a continuance of its former prosperity.

SAYS the *New York Produce Exchange Bulletin*, one of the best of our exchanges: "The AMERICAN ELEVATOR AND GRAIN TRADE of Chicago was one year old on the fifteenth of June. It has shed its down, cut its eye teeth, and got its wisdom teeth all in eleven months."

A SILVER MEDAL was awarded to the Watson Grain Elevator at the Exhibition of Railway Appliances held in this city from May 24 to June 23, being the highest and only award made for the "best grain elevator." Four patents covering important points in grain elevators have just been granted Mr. Watson.

THE widely-known firm of Howes, Babcock & Ewell, Silver Creek, N. Y., was dissolved by mutual agreement on July 2. Howes & Ewell succeeded to the business of the firm, which, as our readers are aware, consists principally in the manufacture of a full line of grain-cleaning machines for mill and warehouse purposes.

A CORRESPONDENT wishes to know why we, "like all other papers," have dipped into railroad matters. For several reasons, one of which is that new lines of railroad generally have points where elevators are needed, and some of our readers may profit thereby. Then again, there is no subject apart from grain itself in which dealers take so deep and natural an interest as in that of transportation.

THERE has been not a little unfavorable comment passed upon the late unlamented legislature of Illinois for its numerous sins, principally of omission. For instance, the disappearance of the warehouse bill occurred under circumstances not exactly creditable to those concerned. It is believed that a large corruption fund was sent up from St. Louis and was freely disbursed where it would do the most good.

THE *Grain Cleaner*, of Moline, Ill., gives us the following botanical glucose: "The AMERICAN ELEVATOR AND GRAIN TRADE grows like a plantain in the tropics. It struck root in fertile soil, and is receiving all the attention requisite to a fruitful development." Praise from an elder in Israel who already numbers Vol. 6, No. 6, to our Vol. 2, No. 1, is praise that is appreciated. Say some more good things about us, Clifford, to your numerous readers. They are worth money to us, and don't cost us anything.

THE Grain Inspection Department of this state ran behind about \$18,000 last year. On June 29 the Board of Railroad and Warehouse Commissioners took action to make the Grain Inspection Department self-sustaining. The board reduced the salaries of the employes in the department in the aggregate \$7,700 per annum, equal to about 10 per cent. It was also decided to increase the inspection fees from thirty to thirty-five cents per car, and the canal fees from twenty-five to fifty cents per 1,000 bushels.

THE Chicago Open Board of Trade, which is waging a plucky fight with its selfish rival, filed a bill in the Circuit Court on July 14, to prevent the "Big Board" from cutting off its telegraphic facilities. It states that the ticker has been removed from its room, but it is allowed to use the Morse instrument on condition of not posting the quotations. The big board is now threatening to cut off even this mode of receiving information, and the Open Board asks for an injunction, claiming it is entitled to such news, and that its members will be irreparably injured if the communications are cut off. A temporary injunction was granted by Judge Moran, under a bond of \$1,000.

AT the late Exhibition of Railway Appliances Messrs. Shields & Brown, of 78 and 80 Lake St., Chicago, made a very handsome display of steam pipe and boiler coverings, which attracted much attention. They also covered over a thousand feet of pipe in the exposition building, in order to illustrate in a practical way the merit and value

of their coverings to all interested visitors. This enterprising firm were awarded by the Exhibition the silver medal which was offered for the "Best Boiler and Pipe Covering." There were five other exhibits in the same line. This award is of course highly gratifying to Messrs. Shields & Brown, and we believe it was well deserved. Some of their patrons are among the best known corporations and business firms in the country, among which we may enumerate the Pullman Palace Car Co., the C. B. & Q. R. R. Co., the Edison Electric Light Co., and many others.

REPORTS have been received from the United States Statistical Agents of Dakota and Minnesota giving their estimates up to July 1 of the present wheat crop in that section. The report from Dakota sustains the prospect of 20,000,000 bushels of wheat for the entire territory. Through the Red River country the grain is good, though suffering on June 1 for rain. In Southern Dakota the prospect is "splendid;" the hot weather has done no injury, and was followed by rain and cool weather. There are still liabilities to injuries of various kinds. The Minnesota returns indicate 94 per cent. of an average crop of wheat, or a yield of 31,500,000 bushels. Drouth has injured the northern counties, especially in the Red River region. Rains were falling at last accounts. The condition of corn on the first indicated a crop of 81 per cent., but it has since been growing, and may reach 90 per cent. of an average; the stand is too thin for much more. On July 8 the general reports from Minnesota and the Red River Valley were still favorable; beneficial rains had fallen over large sections that had been suffering with drouth. Reports from large farmers in the latter region were to the effect that the general wheat outlook was good, and other grains in proportion. Secretary Shaffer of the Iowa State Agricultural Society, has completed his crop report to July 1. Every county of the state, over 800 townships, is represented. The indications are that Iowa will stand in the first rank this year in her production of corn and oats. The weather of late has been favorable. Corn has an increase of acreage of 8 per cent. over 1882, and the average condition is 89, a gain of 6 per cent. over last report. The figures for winter wheat are 90, and of spring 101. Oats has also an increased acreage of 11 per cent. over last year, and their condition is 102. The condition of winter rye is 92; of spring rye, 96, and of barley, 90 per cent.

## AMERICAN SHIPPING.

ON the occasion of the recent meeting of the Executive Council of the National Board of Trade at Cincinnati, an address was issued by Mr. Hamilton A. Hill, the secretary, in which he reviews the work of the National Board during its fifteen years' existence. One of the most important matters that came before it immediately on its organization was that of the American shipping interests, and the facts as to its decline, and the remedies, were then broadly and thoroughly discussed by a Board Meeting at Cincinnati, representing thirty Boards of Trade and Chambers of Commerce, and all the sections and interests of the United States. Abandoning the traditional idea that a sea-going vessel should not be owned by an American citizen, unless it had been built in an American ship-yard, by an almost unanimous vote the Board recommended the enactment of such laws as would allow American citizens to purchase, build or equip any class of sea-going vessels that commerce required, propelled either by sails or steam, and permit them to register under the American flag on payment of a specified duty on their cost. It was also recommended that a bounty be offered for the encouragement of ship builders, and that a liberal compensation be paid for ocean mail service. The present national spirit of opposition to subsidies and bounties did not then exist. What the result of this liberal policy would have been, if adopted in 1868, may not be positively asserted. What the effects of the policy pursued has been, can be seen at a glance at official figures. In 1868, the



total regular American sail tonnage was 1,565,732, and of steam tonnage was 221,939. In 1882 there was reported a decline in the tonnage of sailing vessels amounting to 273,438, and of steam vessels of 67,369 tons. The following table shows the comparative percentage of American and foreign tonnage entered at seaports of the United States in the years named:

	American. Per cent.	British. Per cent.	Total Foreign. Per cent.
1868.....	44.26	42.15	55.74
1882.....	20.25	52.40	79.75

Difference.....24.01

The decline has been much greater from before the war. In 1856 the American percentage was 71.56; and in 1861 it was 66.35. If no adequate measures are adopted, a few years will find the American flag covering no commercial marine on any oceans, as is now almost the case on the Atlantic. The American National Board of Trade is in no way responsible for this result; from its first to its last meeting it has kept this question before the country, and sent out broadcast its printed discussions.

### TRACK-LOADING GRAIN.

THE American farmer is a man with a perpetual grievance against somebody and the elevator man and the railroads come in for a fair share of his condemnation. In Kansas they have complained that the local elevators "robbed" them, and they demanded the right of loading their own grain upon cars. The legislature has given them that privilege, and now every farmer can be his own elevator. A Leavenworth paper very shrewdly suggests that everything may not prove as lovely as the farmer imagines. It says: "The farmers of Kansas have long had their supposed grievances against elevators, claiming that they have been robbed, a cry that is easily raised, and very hard to prove. Under the railroad law they have a redress that may not prove so effectual as they now think. They now have the same rights to cars as elevators, and can ship their grain without paying toll at the starting point, but how they will come out at the elevators in Kansas City remains to be seen. They must either load and ship, trusting to weights, shrinkages, etc., or they must fall into the hands of track-buyers who, having no interests in the community, feel at liberty to cheat and swindle to their heart's content. We are ready to predict that all who try this track loading will gladly return to the elevators and deal with the men who are financially interested in the communities where they live." All of which is good, sensible talk.

### THE LARD CORNER.

The McGeoch lard "corner," which has been in progress for several months, came to a termination disastrous to the manipulators, and to many other large firms, on June 16. The charges of adulteration of the prime steam lard of Fowler Bros., brought by McGeoch some weeks since had a contrary effect to the one intended, and neither decreased prices or the market supplies, which had much larger resources, both in hogs and lard manufacture, than had been estimated. Although the Fowler lard was afterward received by McGeoch, the question of adulteration was not dropped, and at present writing the committee of the Board of Trade have it still under investigation. The firm of McGeoch, Everingham & Co. is composed of Messrs. Peter McGeoch, of Milwaukee, Wis., G. Sumner Everingham, F. A. Crittenden and J. H. Peacock. Mr. Daniel Wells, Jr., who was largely interested in this deal, was also supposed to be a partner in the firm, but it is denied and has not been proven. He is a millionaire of Milwaukee, seventy-four years of age, several times a member of Congress, and connected with other important firms. Mr. Peter McGeoch is fifty years of age, and came to this country from Scotland over twenty-five years ago; he soon engaged in provision and grain dealing, and has been since 1875, noted as a manipulator of wheat corners. In 1878 he was the manager of the "July wheat deal," and was very successful. He had lately become the principal owner of the

Milwaukee city railroads and held very handsome and valuable farm property, and was popular among his fellow citizens. The three latter members of the firm, are said to have had but little when they entered.

The actual losses of the agents in this venture are as follows: Mr. McGeoch sank in the deal \$1,050,000, and Mr. Dan'l Wells, Jr., \$750,000; they failed for \$800,000 each, making a total loss of \$3,400,000. There have also followed the failures of a large number of firms, prominent among which were J. M. Ball, Ellis & Lightner, Holley & Allen, and a number of others, for a sum amounting to \$300,000. Some ten days after the crash the failure was announced of Nichols & Co. of this city for \$289,000, followed by the assignment of the firm of R. N. Parks & Co., brokers and bankers of New York City, which was in reality a branch of the Nichols firm of Chicago. These firms were largely engaged in lard speculation as well as in pork and grain. It is difficult to ascertain how great and widespread are the losses and failures that are due to this attempt to corner the market. The McGeoch firm was at the same time engaged in grain dealing, and the fluctuations and uncertainties of the wheat market had their causes largely in these unhealthy speculations, though centering upon one product.

### OUR SECOND YEAR.

With this number the AMERICAN ELEVATOR AND GRAIN TRADE starts upon the second year of its life. We may frankly avow that its success has been far greater than we anticipated. While we knew that there was a large field for just such a paper as we proposed issuing, we were prepared to meet with a cool reception at first, for the public seems tired of extending welcome to the host of new journals that are almost daily sent forth into the world. But with our first number we could see that this paper could count upon a steadily increasing constituency, and such has been the case. Our list of subscribers has grown daily since our last issue, and the rapidity with which renewals of expiring subscriptions are being made, convinces us that our efforts to give the trade a worthy exponent are appreciated. So, too, an advertising patronage has steadily grown, and this journal enters upon its second year with every assurance of increased prosperity. Our friends have our thanks for the many favors we have received at their hands; we can only say that our highest endeavor will be to justify their patronage and friendship.

### WHEAT AND CORN.

Two weeks ago the *Price Current* submitted a report embodying the result of its special investigations in regard to the probable wheat production this season, arriving at 310,000,000 bushels for the winter growth, against 383,929,150 last year, and 130,000,000 bushels for the spring crop, against 120,256,320 last year—or a total of 440,000,000 bushels against 504,185,470 last year; decrease in winter wheat about 74,000,000, and the increase in spring 10,000,000, or a decrease of 64,000,000 on the crop. It was also said: "We have shown in a former statement that in all probability last year's crop adds 50,000,000 bushels to the reserves of the country, over the supply a year ago, and furnished 145,000,000 bushels (including flour) for export. If the present crop shall yield 440,000,000 bushels, the basis of supply for the coming twelve months, counting on reserves being reduced to what they were a year ago, will be enlarged 40,000,000 bushels; or in other words, there will be 40,000,000 bushels more available for domestic and export purposes, than was made use of out of last year's crop."

Last Saturday's *Bradstreet's Journal* publishes a statement with estimates for the wheat crop which very closely corroborates the *Price Current's* information published two weeks ago, the aggregate for winter wheat being 316,920,000 bushels, and for spring 126,440,000, or a total of 443,360,000 bushels. The report of *Bradstreet's* says: "The exhibit shows a probable decrease in the current year of over 69,000,000 bushels of winter and an increase of over 8,000,000 bushels of spring wheat as compared with the output of 1882, or a net decline of about 61,000,000 bushels in production, or over 12 per cent. This, with the surplus of about 60,000,000 carried over from the crop year ending July 1, 1883, will leave the country quite as well prepared to supply its domestic requirements, besides meeting the demand abroad, as it was a year ago, after a short crop and with a light supply."

The July report of the Washington Department of Agriculture, which appeared yesterday, says "The indications point to a winter wheat crop of fully three hun-

dred million bushels, and a product of about one hundred and twenty-five millions of spring wheat."

This, also, may be regarded as substantially a corroboration of the accuracy of the *Price Current's* information published two weeks ago. The Department report says: "There has been some improvement in winter wheat in Canada, New York, Virginia, South Carolina, Texas, Ohio, Michigan, Indiana, Illinois, Missouri, Kansas and California, which advances the general average condition from 75 to 79. The spring wheat average has advanced from 98 to 100."

The lowering of temperature for several days the past week does not appear to have had much influence in retarding the favorable progress in the corn crop, and the previous outlook is fully maintained, so that the promise at date is in the main excellent.

The Department of Agriculture report issued yesterday, says of corn: "The area of the corn crop has been increased about 2,500,000 acres, making an aggregate of 68,000,000 acres. There has been some extension of the area in nearly every state. The proportion of increase is large in the Northwest, and in the Southwest. On the coast, from Virginia to the Mississippi the advance has been small. In some places the reduction of price from the enlargement of the supply last year had a discouraging effect. There has been too much rain in the great Western maize districts, and failure of stands from planting poor seed, making the crop late and the growth small, but the improvement has of late been rapid. Taking all the states together the average for corn is 88, against 85 last July, 90 in 1881 and 100 in 1880. The averages of the principal states are as follows: New York 84, Pennsylvania 89, Ohio 83, Michigan 78, Indiana 90, Illinois 82, Iowa 80, Missouri 82, Kansas 98, Nebraska 87, Dakota 78. In the South the averages range from 90 in Tennessee to 103 in Louisiana."—*Cincinnati Price Current of July 12.*

### WHEAT EXPORTS FROM THE PACIFIC COAST.

No portion of our vast country has felt the stimulating influence of our rapidly increasing exports of wheat and flour more than the Pacific Coast. These products from California hold a special position in the English markets, and are separately valued and classed. At the same time the limit of her wheat acreage has not yet come in sight; while the improvement of her varieties and grades, at present below that of the American winter, as well as of the English wheats, have received comparatively little attention. California has also kept pace with her Western brotherhood in her increased exports of flour, having shipped nearly \$5,000,000 worth abroad in 1882, more than one-half of which found its way to the United Kingdom, and over one-fourth was sent to China.

In spite of these facts, and the increasing facilities of commerce, especially in the opening of the Southern Pacific Railroad, which, aside from its shipments direct and at low rates to the port of New Orleans, has done perhaps even more in lowering competing ocean freights, there are thoughtful observers in that state who believe this faith in the enduring supremacy of its wheat trade is exaggerated, and that, in the perhaps not very distant future, the profits of wheat growing in California for foreign shipment will be blotted out, and a loss take their place. Among the reasons assigned are the tendency of wheat growing to impoverish the land, as proved in the experience of all wheat-producing countries, notably old, and New England. Meanwhile the value of land is steadily rising, and with diminished production, land at \$40 per acre cannot produce profitably wheat to be sold at the prices that can be obtained in foreign markets.

The geographical position of the state is considered as a great drawback in her competition with wheat-producing countries, both to the West and East. On the Pacific, a long distance has to be passed to equalize the expense of transportation with the increasing competition of New Zealand and Australia, the latter standing in the value of its product next below the famous hard wheat of Russia; and of India, which already is said to have an annual surplus of 100,000,000 bushels, with almost limitless means of increased acreage when inland transportation to the seaboard shall render its cultivation profitable. These Indian wheats, though inferior in some qualities, have others of great value to both millers and bakers for mixing with other varieties. The facilities of transportation for the region east of the Rockies, through the Northern and Canadian Pacific Roads, and the vast natural and artificial waterways, constantly diminishing its cost on account of the fierce competition of lines and states, present other unfavorable facts in studying the future of the California grain trade. Meanwhile, the territories of the Northwest, as Dakota and even Montana, and the broad belt of wheat lands extending a thousand miles to the Rocky Mountains from Lake Winnipeg, in Canada, are being rapidly filled with an energetic, enterprising population of grain and flour producers. Through these rapidly increasing channels of commerce, with their decreasing costs of transportation, the immeasurable products of these sections, the finest wheats of the world, will find their way to meet the demands of foreign markets.

While these facts and views are worthy of consideration, and the resources of the Pacific Coast should be broadly studied and developed, the contingencies of wheat production and trade are very great, and beyond calculation. The home and coasting traffic will make ever increasing demands on the wheat and flour products of this great state, while what the future is of those great Asiatic kingdoms that border the Pacific, no human foresight can predict.



## Railway Intelligence.

The newly-organized Michigan, Indiana & St. Louis R. R. Co. expects to build a road from Sturgis, Mich., to Danville, Ill., a distance of 167 miles.

A line is projected from the Cape Girardeau & Southwestern R. R., at Lakeville, to Bloomfield, Mo. A bonus of \$1,000 per mile and the right of way is offered to any company undertaking the work.

The Chicago, Burlington & Quincy Railroad Company has now 14,520 freight train cars and 225 passenger train cars. If they were all placed in a line on a single track, they would reach over eighty-eight miles. They are worth nearly \$10,000,000.

The lines of railways in the five divisions of the earth cost, in round numbers, \$16,000,000,000, and would reach eight times around the globe. The first steam railway was opened between Darlington and Stockton, Sept. 17, 1825, and between Manchester and Liverpool on Sept. 15, 1830.

Negotiations are in progress between the officers of the Grand Trunk, Baltimore & Ohio and the Wabash for the formation of a through line from Chicago to Detroit and Niagara Falls. The line is to be over the Baltimore & Ohio from Chicago to Auburn Junction, thence over the Wabash to Detroit, and thence over the Great Western to Buffalo and Niagara Falls.

It is announced that the Canadian government has decided to make no further grants to the colonization or railway companies in the Northwest for the present, and until the present chartered railways are completed there will be no further sales of lands. If, however, it is found necessary in the interest of the country to make further grants, the price will be raised fifty cents per acre. This conclusion was arrived at owing to the rapid increase in immigration into the Northwest.

A Montreal dispatch states that L. M. Shute, representing a number of American capitalists, has closed the contracts for the construction of the Ontario Pacific R. R., and made arrangements to float the bonds, amounting to \$12,000,000. Work will begin at once and trains will be running over part of this valuable road by Oct. 1. The Ontario Pacific will connect Gravenhurst, the present terminus of the Northern & Northwestern R. R., from Toronto, with Callanby Station, the eastern terminus of the Canadian Pacific R. R.

Since the low grade of corn has commenced coming into market, those who have been holding corn in Kansas, Nebraska, and Iowa which they feared could not find a sale that would warrant a shipment, have been uncovering exposed cribs and are sending forward every grain which they have any assurance of finding a market for. They seem to feel assured that the indications for a corn crop are sufficiently good to warrant them in disposing of what they have on hand, and are loading every car they can secure with their mixture. This is expected to keep up the tonnage beyond what it has been in previous years, and in excess of what the most sanguine of railroad officials thought the tonnage would be during the summer.

Henry Villard estimates that 28,000 tons of grain will be garnered in Eastern Washington, and 45,000 tons in Western Oregon. This is a large increase over any previous year. The Oregon and California line will be completed in thirteen months, giving railroad connection with the great lakes and St. Paul to San Francisco, via the Northern Pacific and the Oregon and California systems. The completion of the latter road will affect somewhat the ocean traffic of the Oregon Railway and Navigation Company, but business has increased so much that the facilities of the latter line will be devoted to the towns of Seattle and New Tacoma, on Puget Sound, which have enjoyed extraordinary growth recently, and which threaten to rival San Francisco by reason of their products and iron resources.

Apropos of the howl made by political demagogues in California against the railways of that section, it may be said that from a report just made by the Central Pacific management to the Railway Commission of California, it appears that, in spite of the yelling and whooping over extortionate charges and the exactions of an odious monopoly, the net earnings of the company were \$1,302,115 less in 1882 than in 1881. The general manager says: "This great decrease of net income, amounting to 27 per cent. was caused partly by renewal and improvements to property, but to a much larger extent was due to the increase of traffic at lower rates. In other words, the company, in response to popular demand, so reduced rates on all their lines in 1882 that even with the increase of business the increase of cost of accommodating it was so great that the net result was a loss of 27 per cent. net income."

California wheat, which is likely to amount to 60,000,000 bushels, is already the object of a lively railroad fight, the South Pacific having made special arrangements to convey the entire crop to New Orleans for foreign shipment. This will likely be the beginning of a bitterly fought freight war between the three great trans-continental lines, as this tendency of southward commerce involves the business interests of Chicago as well as the Atlantic cities. Thus will railroad monopoly, at long stretches of time, cure the evils of extortion through the conflict of divergent commercial interests, for no one can serve two masters, neither can railroad consolidation and pooling of earnings serve New Orleans and New York at the same time. But the wheat of California is

not the only object which will cause contention between the continental lines—the entire freight of the great West is also involved, which the South Pacific road, unhindered by the snows of winter, will seek to carry at reduced rates to the discomfort of the Union and Central Pacific roads in their customary practice of extortionate prices.

Recently Dr. Bergin, M. P., Cornwall, Ont., was in Ottawa for the purpose of meeting several American capitalists who intend taking an interest in the projected Ontario and Atlantic Railway scheme, of which he is one of the principal promoters. It is understood that arrangements have been made with these capitalists for the construction of the line and the purchase of the bonds of the company. It is intended that the line will run from Cornwall to Sault Ste. Marie, via Ottawa, Arm-prior, Eganville, and the valley of the Bonnechere. When completed it will shorten the distance between the Sault Ste. Marie and New York, via Montreal, by 149 miles, and via Brockville by 88 miles.

The opening of the Southern Pacific Railroad to New Orleans from California, for the transportation of wheat, with a direct connection with a line of heavy freight steamers, by which it can be laid in Liverpool in thirty days from San Francisco, is to prove a most important factor in the market price of wheat. It has already had a marked effect on the ocean traffic. Hitherto the California producer has not been able to get ships to carry much over half its crop, and the freight charges were exorbitant, running up to \$20 a ton, nearly 25 per cent. more than the ordinary rate. The railroad company will correct this, and hold rates down. Charles Crocker, president, says their company can handle one-third of the present crop, and next year can double their capacity, if required. California, it is believed, will have a surplus this year of wheat for export of 38,000,000 bushels; the difference in time of from thirty to sixty days by rail East, compared with five to seven months by Cape Horn, will give this one-third an important influence on the general market. The farmer of that section, with few facilities for storage, markets his crop as soon after harvest as he can procure transportation, and ships directly from the field. As the wheat harvest of California is a month earlier than anywhere else in this country, her new wheat will anticipate that of any other section in the foreign markets. This is not a favorable prospect for the "bull" speculators.

At a meeting of the Railroad Commissioners at San Francisco, Cal., on June 27, at which there was a full attendance, Hon. J. L. Dow, M. P. of Australia, was present, and, at request, made some statements as to the Australian grain freights, railroads, etc. Replying to questions, which he preferred to do, he said: From Horshan to Melbourne, almost synonymous with from Chico to San Francisco, the rate was seven cents for sixty pounds. From Dilboola to tidewater, about 250 miles, the rate was seventeen cents per bushel. The colony of Victoria produced about 15,000,000 bushels a year. There was a considerable reduction, approaching 50 per cent., on grain shipped to the seaboard over goods shipped inland. The present grain rate to Chico, as compared with theirs, would be about six cents a bushel. He did not think the Australian flouring system was as good as the American. The first rate he had mentioned was equal to about \$4.66½ a ton, and the Australian car was about sixteen tons carrying capacity. The character of the road from Horshan to Melbourne was about the same as from Chico to San Francisco. The railroad controversy here interested him very much, for, although the government built and controlled the roads, the parliamentary constituencies operated them by their votes. The farmers are now agitating for a uniform rate of sixpence a bushel all round. The conditions of the two countries in comparison with Melbourne, Ballarat, Sacramento, and San Francisco were almost identical. Mr. Dow said that the cost of building railroads there is all the way from \$10,000 to \$20,000 a mile, and the government provided the rolling stock.

A STORY ABOUT "OLD HUTCH."—"Hey! old feller, give us a lift with this planner, will you?" said a cartman to a straight, farmer-like looking man who was passing a Hyde Park cottage before which the cart had halted.

"What are you paying?" said the "old feller."

"A quarter."

"Where's it going?"

"In here."

"All right."

The "planner" was lifted in, and the "old feller" walked out of the house, took his coat from the fence, and walked off without his quarter.

"He'll not get his quarter," said the cartman, "unless he gets back here pretty sly."

"He'll not come back," said a broker who witnessed the little scene.

"Why not?"

"That's B. P. Hutchinson."

For all the broker knows that cartman is watching the retreating figure of the owner of the Corn Exchange Bank still.

During the recent warm weather quite a number of persons in the north of London have been bitten by mosquitoes. Women and children have especially suffered, some having been almost blinded through the swellings caused by the bites of these foreign insects. It appears that large numbers of mosquitoes were brought over from America among the corn, and they have been frequently seen to fly up when the grain is being transferred for grinding in a large steam flour mill in the vicinity.—*Times*.

## Items from Abroad.

Grigorieff's warehouses and a steam flour mill on an island in the Neva, near St. Petersburg, burned June 25, inflicting a loss of 1,500,000 roubles.

Marseilles merchants are buying Indian wheat, and it is reported that hard Bombay wheat is dearer in Marseilles than in London, although the latter is the more distant port.

It is reported that the new wheat crop of India is locked up from English markets on account of the outbreak of the Asiatic cholera, commerce between these countries having been interdicted to prevent spread of that scourge.

Crop reports from Russia are favorable. The great wheat-growing country of Russian Poland expects an average crop. The important country to the north of the Black Sea, from Odessa to the Azof, has been refreshed by timely rains, and gives promise of a good yield of wheat.

Rye production in Russia is about 600,000,000 bushels, and in some years goes above 700,000,000; Germany about 300,000,000; France, 75,000,000; Austro-Hungary, 100,000,000; total for these countries, 1,075,000,000 bushels. The average annual wheat production in these countries is about 700,000,000 bushels.

In the Italian Chamber of Deputies recently, in a debate on the tariff question, Signor Gagliardo declared that the fears of America competing with the Italian grain trade had little ground. Cereals from America, he said, were always dearer than Italian cereals, and it was absurd, therefore, to impose an import duty on the foreign production.

It is asserted by New York agents of European grain merchants that the export trade in wheat has been greatly injured by the trickery of some shippers. One course pursued has been to contract with European houses for the shipment of a prime grade of wheat at a fraction below the ruling figures. The shipper would send an inferior grade, and on arrival the grain would be rejected and the shipper notified of the fact that the consignment was not according to contract. Negotiations for a compromise would then be opened, resulting in an acceptance of the consignment at a reduced price, which would actually give the shipper a profit on the transaction. Another course has been to mix good with inferior grades of grain, knowing that the fraud would not be discovered until the consignment was examined in Europe, when a compromise could be made with results satisfactory to the shipper. Such operations as these have, to some extent, discouraged fair dealers, who cannot compete with such rivalry.

The rapid progress British India is making in the production and exportation of wheat has recently been brought to notice by the last report of our Consul-General at Calcutta. It appears that about 20,000,000 acres are now devoted to wheat culture in India, with an estimated annual yield of considerably over 200,000,000 bushels, of which last year 37,000,000 were exported. The *Vermont Watchman*, noticing these facts, well says: "The wheat fields of America may have in England's Indian provinces a competitor in European markets which will compel the farmers to employ every means to cheapen production, and the railways to reduce the cost of transportation, to maintain a hold upon the foreign demand." With its outspreading system of railways, already about 9,000 miles in length, the navigation of the Ganges for steamers now extended to Cawnpore, with a canal 350 miles long, making navigation possible to Hardwar, 1,300 miles from the sea, the farmers of Northern India will soon have ample and cheap transportation facilities to enable them to get their surplus wheat into European markets. If, with these advantages and a climate not subject to extremes of cold, the rude methods of Indian agriculture were replaced by more modern systems, India could easily become a formidable competitor with America in the world's wheat markets.

The great wheat-producing sections of Russia are said to be rapidly falling off in that cereal. In a review of the subject, the English journal *Land* gives the following information respecting the matter, and says that Russian agriculture is failing. The "black soil," the fruitful soil of the South, it says, is exhausted by scouring, and the poorer soil of the North requires a greater expenditure of capital before it will repay the enhanced cost of working. The picture given of the position of the landed proprietors, and of their relations with the agricultural laborers, indicates a highly depressed and unsettled state of affairs. The estates of the rural nobility, it is said, are offered for sale in hundreds, for the reason that they are not capitalists, and their land cannot be properly cultivated without the expenditure of considerable sums. The laborers are asserting their independence, and are able to combine more readily than in England, owing to the existence of the communal system. They are described as ignorant and insubordinate, but they are apparently not lacking in a certain short-sighted cunning, for in hiring themselves out they bargain for payment in advance, and desert the landlord at harvest time, leaving him cheated of money and labor, without redress. Troubles beset him at every stage. Even where he has contrived to retain his laborers he is often forced to see his corn rot in the stacks for want of barns. The defects of the railway administration contribute their share to the farmer's distress.—*Millstone*.



## The Trade.

The Harrison Conveyor Co. of this city have been securing a large number of orders for their conveyor for grain elevators, malt houses, etc.

Messrs. Dickey & Pease of Racine, Wis., have commenced the manufacture of a separator which they believe will work a revolution in the business. They propose to sell it at a very moderate price. We shall give further particulars in a future issue.

At the recent Exposition of Railway Appliances in Chicago, the Anchor brand pulley blocks, made by the Penfield Block Co., Lockport, N. Y., received first award, a bronze medal. The same company were also awarded the bronze medal for best baggage barrow.

The firm of Howes, Babcock & Ewell of Silver Creek, N. Y., composed of Simeon Howes, Norman Babcock and Carlos Ewell was dissolved on July 2. On July 5 Simeon Howes and Carlos Ewell formed a co-partnership to carry on the business of the late firm under the firm name of Howes & Ewell.

The Link-Belt Machinery Co. are building 8,000 feet of link-belt to go to China. During the week the company have taken contracts amounting to \$13,000 to furnish two flouring mills in Indiana. They are placing in the Indianapolis Car Mfg. Co.'s Works a third conveyor, and a grain elevator and conveyor, with 60-foot centers, in Hobart & Snyder's elevator at Cherokee, Iowa.

The Kerr Murray Mfg. Co. of Port Wayne, have contracts for extending and enlarging gas works in the following cities: Johnstown, Pa., Altoona, Pa., Allegheny City, Pa., Circleville, Ohio, Ironton, Ohio, Galesburg, Ill., Ottawa, Ill., Saginaw, Mich., Jamestown, N. Y., Mankato, Minn., Murfreesboro', Tenn. They have also the contract for erecting new gas works at Lima, Ohio. These contracts range from \$5,000 to \$20,000 each. This company is building for J. T. Moulton & Son of Chicago, the machinery for an elevator at Detroit, Mich.

The mill of Martin & W. H. Nixon, at Manayunk, Pa., will be shut down on the 16th, in order to put on the pulley cover ordered from Henry H. Taber, No. 5 Barclay street, New York. The pulley to be covered is twenty-four feet in diameter and takes seventy-five feet of rubber for each lap, and requires in all 1,356 feet. These covers are the best device for the prevention of the slipping of belts ever invented, and are worthy the attention of all manufacturers who are troubled with loss of power in this way. Wherever a belt slips the friction generates heat which burns out both leather and rubber belts, and the application of this cover not only prevents the slipping, but increases the life of the belt.

We are in receipt of a circular letter from the Great Western Mfg. Co. of Leavenworth, Kan., containing cuts of their new works. In their letter they say: "We take pleasure in referring you to the above cuts of our new works, which have arisen from the ashes of our disastrous fire in January, and are now in operation. These buildings form only a portion of our works, and there is now no establishment in the country better prepared to supply the wants of the mill men of the West. Both iron and wood-working departments are equipped with machinery of latest designs, regardless of cost. Among other valuable tools, we have introduced Gleason's patent gear cutting machines for dressing the teeth of iron and wood gears, and special machines for pulleys and shafting, all having reference to turning out work with rapidity and perfection. Having in our employ milling experts, competent to advise in relation to any of the improved systems, and carrying a large stock of mill supplies of every kind, we will be glad to hear from you when in want of anything in our line."

The Link Belt Machinery Co. of Chicago, Ill., are manufacturing an improved endless freight conveyor, designed to carry cargo freight of any description, either horizontally or on an incline. It consists of a double strand of detachable giant chain, upon which is bolted hard wood lagging, six inches wide, and two inches thick, and each link is provided with a roller to save friction, and enable it to convey heavy loads with but little power. It is driven by friction gearing, can be run in either direction, and is adapted to use on steamboat docks as well as in warehouses. The warehouse of the Memphis Grain and Package Elevator Co. at Memphis, Tenn., has six of these elevators, three of which are seventy-five, and three thirty-five feet long; the longer ones are constructed entirely of iron, and used for unloading steamboats direct from the hatches, which are brought abreast of the conveyors, which are pivoted at the warehouse end. Six full hogheads of sugar have been conveyed from steamboats on one of these elevators at once, and 1,320 barrels of salt per hour have been unloaded. The shorter elevators are used to raise the lighter packages from the main to the upper floor. The frames can be made of wood, or entirely of iron as preferred.

Messrs. E. P. Allis & Co. of the Reliance Works, Milwaukee, report the following from among recent sales: To the La Crosse Brush Electric Light & Power Co., La Crosse, Wis., a 14x36 Reynolds-Corliss Engine, complete, to drive their electric light plants; to Price & Wilkinson, Taylorville, Ill., a 16x42 Reynolds-Corliss Engine, complete, to run their flour mill at that place, together with the roller mills and special machinery for this mill; to the Geo. T. Smith Middlings Purifier Co. of Jackson, Mich., a 12x30 Reynolds-Corliss Engine to furnish power for their works at Jackson; a

32x48 Reynolds-Corliss Engine, complete, to the Geo. P. Plant Milling Co. of St. Louis; to the Texarkana Oil Mfg. Co., Texarkana, Ark., an 18x42 Reynolds-Corliss Engine complete, with boiler, heater, pumps, etc.; a 12x36 Reynolds' New Style Engine to the Milwaukee Industrial Exposition to furnish power for electric light plants, etc.; to the Nashville Mill Co. a 14x36 Reynolds-Corliss Engine complete, with boiler, heater, pump, etc., also the roller mills, special machinery, etc., for their new mill, which, when completed, will have a capacity of 150 barrels per diem; to J. Hayes, of the firm of J. & J. Hayes, Goulburn, New South Wales, Australia, an 18x36 Reynolds' New Style Engine, also the Allis Roller Mills in Gray's Noiseless Belt Frames; to the Haxtun Steam Heating Co. of Kewanee, Ill., a 22x48 Reynolds-Corliss Engine complete, with boiler, heater, pumps, etc., for their works at that place; to the Plano Mfg. Co., Plano, Ill., a 26x48 Reynolds-Corliss Engine.

Says the *Iron Age*: "The Chicago Rawhide Mfg. Co. are manufacturing rawhide belts from the widest that may be necessary, down to the narrowest. In the Exposition Building there were a great number of belts running, the widest of which was twenty-six inches, and taking power from the engine which drove the Brush lights in the building. This belt has been in use for three years, and is apparently in first-class condition at the present time. In addition to flat belts, the company are making a line of rawhide ropes twisted in the same manner as a hemp rope. The larger ropes—that is, above the smallest size of twisted rope—are three-eighths, and they are made up to any diameter that may be desired. Below that the round ropes are made in the same manner as round and leather belting, being a single strand or thong of leather twisted up into circular shape. These are made down to one-eighth inch in diameter. Lace leather is also made by the same process in all widths and lengths. The sides measure from eight to twenty-four feet, and are of all grades of thickness. The entire freedom from hard spots is one of the points which the manufacturers urge as a great advantage of their product. The leather is cured under Krueger's patent, and retains its life and strength in a remarkable manner. It is not tanned, and closely resembles ordinary rawhide. Moisture seems to have very little effect upon it after being cured in this way. Some of those who have used the belts make extraordinary statements in regard to the running of the belts in damp situations and places that are exposed to both heat and damp at the same time. From these statements we suppose that the belts are exceedingly indifferent to either heat or moisture. It would seem that these ropes ought to make the very best driving gear for electric lights and other machinery where a considerable power must be transmitted with the least possible slip. In the exposition a very long line of round belting was running, driving a flexible shaft. The rope ran over six idlers, and was at least 130 feet in length, and showed, after four weeks' running, no perceptible signs of wear. The rope is quite as flexible as the softest rope made. Indeed, one and a fourth-inch rope bends much more readily than the best hemp. For round rope the hide is cut in a circle, and the company get about 800 feet of one-eighth inch belting from an ordinary hide."

### THE BAG BUSINESS.

The vast bulk of the grain exported in bags through Eastern ports is carried in sacks that are borrowed on this side and returned in bales to make the journey over and over again under similar conditions. The characteristic restlessness of the nation extends even to its grain bags. It inhabits only those of American make; in foreign bags the disposition to promiscuous travel is restricted by the 40 per cent. duty exacted by a discriminating government. Yet, in keeping with the principle of minority representation there are conservative American grain bags that travel on their dignity and for what they are worth. Most of them hail from the Pacific slope. Grain sent East from California to cross the Atlantic comes sacked from the fields, because of the lack of canal transportation in the Golden State. The bags in which it is carried seldom make the return trip, the reason being they are made to hold a hundred pound weight, or less than two bushels, while the standard Eastern grain bags hold three bushels. Then there are the aristocratic bags that carry grain to Portugal, the Canary Islands, and the West Indies. These are not woven of jute, as of their coarser kindred, but of American cotton, and having brought bread to their buyers are made to clothe them too. They are worn out as shirts by the working men of these nations. The grain bags sent to Cuba come back filled with sugar and an occasional clandestine box of cigars, and are henceforth unfit to be "loaned."

The stout burlap grain-bag of the trade that is turned out of New York manufactories at an average cost of 10 cents—\$1 being a woman's pay for a day's work of 850 bags—is loaned to grain shippers at a rate of pay for a single trip across the ocean reaching nearly one-half its value. It will last from four to a dozen round trips, thus earning its own cost several times over. Yet the risk and expense of handling is so great to ship owners that to borrow even at this enormous interest pays better than to buy. All grain laden vessels leaving New York carry a portion of their cargo in bags for the safety of the ship. English laws require this portion to be at least one-third of the whole. Grain in bulk shifts easily, and were a vessel to be thrown on its beam ends, would swamp it. In case of need, bags, too, can be more easily thrown overboard. Hence the rate of insurance is affected by the proportion of the cargo carried in bags. In

brisk seasons, therefore, enormous numbers of bags are afloat; last year more than 10,000,000. In one brisk season a single firm loaned 3,500,000 bags. Upon their arrival on the other side they are collected by agents of the owners, pressed into huge bales, and returned by the next steamer with a certificate from the American consul that they are truly native bags. Thus recommended, they pass through the custom house duty free, if the figures agree with the clearance papers of the date of their departure, and are here overhauled, patched where the rats have gnawed, and made ready for their next tour of duty. Usually they haven't long to wait.—*New York World*.

### "REGULAR COURSE OF BUSINESS" AT CHICAGO.

The Chicago *Times* of a late date said editorially: "In the regular course of business transacted on the Board of Trade—this is the phrase of a firm of commission merchants in explaining the relations existing between them and a young man who has attained notoriety in connection with operations in the 'regular course of business transacted on the Board.' There is upon the Board of Trade a regular course of business transactions as necessary as it is beneficial and legitimate. There the crop of the Northwest is marketed. It is a crop including all the cereals, and some of the breadstuffs, as wheat when reduced to flour. It covers provisions as well. Upon 'Change, the daily meetings of the Board of Trade for the transaction of business in the regular course, charters for the eastward transmission of these products are made, and policies of insurance are written. It is a busy and convenient mart for the expedition of one branch of business that has carried the fame of Chicago to the four quarters of the globe, and as such is an institution of the highest material value. The volume of its business is immense, and its membership includes much of the activity, enterprise and intelligence of a city remarkable for its vigor.

"But there is an incident of the regular course of business transacted on the Board which, while it enriches brokers and may, as some commission men claim, cause a readier market and a higher price for the grain of the producer, is attended on the whole with the demoralization which marks gambling in all its phases. It is especially destructive of thrift, continuity of thought and endeavor, legitimate ambition and wholesome integrity among youth who are dazzled by the chances of fortune it seems to promise; but its baleful influence falls upon all classes, conditions and ages, and affects sometimes the woman who has a few hundred dollars at her command. Within a few months young men of several well known families have publicly involved in scandal not only themselves but their families because of their transactions in the regular course of business on the Board, and for the one case reported in the newspapers, how many other cases are successfully hushed up? The reports have shown the youth to have become so infatuated in the game they are playing that they lost the sense of commercial honor, and were involved in a labyrinth of shifts and evasions. In the language of the street, they had 'blown into the Board of Trade' all the money they could lay their hands on. They flattered themselves that they were operating in grain. A commission merchant's euphemistic phrase for the open gambling is 'the regular course of business transacted on the Board.'

"Since it will hardly be disputed by any one conversant with the facts that buying and selling on margins with the intent of settling on differences is essentially gambling which falls under the ban of the law and is practiced with more or less secrecy, ought not the Board of Trade, mindful of the vast legitimate business it is called upon to transact, and careful of its own reputation and usefulness, put it beyond the possibility of saying that gambling is in the ordinary course of its business? The gambling which it tolerates, and thereby invests with an appearance of respectability, is more dangerous because more insidious than gaming at the faro-table. The youth who have practiced various games of deception in order to continue their operations on the Board, involving themselves deeper and deeper in the mire and dragging down their friends and relatives, would probably have scorned to enter a regular gambling shop. They willingly deceived or attempted to deceive themselves with the notion that they were not gambling but were engaging in a legitimate venture. Their transactions were in the regular course of business transacted on the Board. And, to the extent that it affords opportunities for gambling, the Board cannot escape moral responsibility in the offenses committed by the gamblers whom it shelters.

"Somebody gets the money 'blown in' on the Board in the transactions made without reference to grain, but only to the fluctuating market price of grain. So somebody gets the money lost at faro or at poker, but no one is the richer in the end, and if the fashion for gaming possessed everybody there would be an end of production. Gamblers prey upon one another like fish, except that fish, eating one another, reduce the number of mouths that are to be fed, whereas it is considered that, whether or not he happens to be in funds, the gambler must be fed in order to live. The patrons of the bucket-shops are commiserated; the proprietors of these gambling resorts are condemned even by the Board of Trade, which countenances the same kind of operations upon a larger scale in its own hall. The difference is one of degree only, and how mischievous in its larger sphere the tolerance by the Board of gambling in differences may become, has been seen in several notable instances of late."



## REFORM IN GRAIN INSPECTION.

Chicago was the capital of the state, practically, during last week. Gov. Hamilton was in the city engaged in the consideration of matters connected with the grain interest which centers here. However large the proportion of "wind" in Board of Trade operations, the actual dealing in cereals makes Chicago the greatest grain market in the world. We have twenty-four elevators, with a storage capacity of fully 25,000,000 bushels. Just at this time a state system of weighing is to be inaugurated, and the chief inspectorship of grain filled by executive appointment.

The term of P. Bird Price as Chief Inspector of Grain expired July 1. His reappointment is urged for the good of the service, and the attempt is being made to create the impression that if he fails to be appointed it will be on political grounds. What purports to be an interview with Gov. Hamilton appeared in one of the morning papers of the city yesterday, which, if correct, justifies this representation. The plain English of that interview is that if Price will appoint some particular man to office under him he can be recommissioned, but otherwise the Governor will put the coveted document in the "game-bag," as Rip did the quit-claim deed in the play. If the Governor has taken any such position he stands on thin ice. The inspection of grain should be conducted on business principles. Of course there is some politics in all such matters, but care must be taken that political considerations are not allowed to interfere with the proper discharge of the duties of the service. If either must give way, by all means let it be the political considerations. It seems almost incredible that Gov. Hamilton should have said what he is reported as saying.

But that is a merely personal matter. The practical question is: Is the service now being conducted on business principles, or is there a loud call for reform? In other words, the question is not what the Governor said or didn't say, but what is the actual state of the service? The revenue of the office is derived from inspection in and out of store. The intention of the law is that the service should be self-supporting, neither more nor less. Of course it is impossible to make receipts and disbursements exactly agree, but the agreement should be substantial. Recently the Board of Commissioners raised the fees, doing so on the ground of necessity. Salaries have also been cut, or are to be. An examination of the records of the office, as disclosed by official reports, shows a very remarkable series of facts—a series to which we commend the Governor's especial attention at this time. Neither he nor the board can afford to ignore the record, nor the demand for reform, which is inevitable from these facts.

The state system of inspection began July 1, 1871. The fees then charged by the Board of Trade were thirty cents per car for in inspection and fifty cents per 1,000 bushels for out. These rates were adopted by the state. The next year they were reduced to twenty-five cents in and forty cents out. That was under the first chief, Mr. Tompkins. Mr. Harper, author of the Harper bill, took the office April 8, 1873, and held it one term of two years, and a few weeks over, going out May 6, 1875. He found the department in debt \$2,153.86, owing to failure to collect closely. To bridge that deficiency the old Board of Trade rates were restored until March 1, 1874, when the state fees were restored. A surplus still accumulating, the fees were reduced to twenty and thirty-five cents July 15, 1874. The 1st of November still another reduction was made, namely, to fifteen cents a car in and twenty-five cents per 1,000 bushels out, the lowest rate ever enjoyed in Chicago. The 1st day of January following the deposits of the department aggregated \$30,254.25. When Mr. Harper went out of office a large part of the money was locked up in the Cook County National Bank, where it had been deposited at the written request of Gov. Beveridge, and a final settlement with Harper was not made for several years. In the meanwhile, all that surplus was tied up. As soon as the board accepted the deposit in the Cook County National for its face, the balance was paid over with interest; but Harper's successor, Gen. John C. Smith, came into office without either a surplus or a deficiency.

Four days after Gen. Smith took charge of the office the rate was fixed at twenty cents in and thirty-five cents out. This being inadequate the rate was raised on June 15 to twenty-five cents in and forty cents out, at which rate they stood until March 1, 1879, when the fee for inspecting out was reduced to thirty cents per 1,000 bushels. In his report, dated Nov. 1, 1881, Mr. Reynolds, who succeeded Gen. Smith, after a short interim, makes this remark relative to an increase of fees: "In considering the receipts of the department, it is proper to recognize the fact that fees for the inspection of car loads was fixed definitely per car, and that within the past five years the average number of bushels per car has increased not less than 25 per cent. Should it therefore transpire that the present fees for inspection do not yield sufficient revenue to meet the reasonable approved expenses of the service, the justification for increasing them, as contemplated by law, is quite apparent and complete." This completeness is more apparent than real, when the rates then being charged are compared with those which prevailed when the surplus was the largest. The present rate at Toledo, Milwaukee, and St. Louis, the points in competition with Chicago, is twenty-five cents per car. During the period in question the Harper settlement was made, and that large sum of money was used in meeting current expenses. Now that

that "pocket" has been exhausted, recourse is had to increase of in-inspection to thirty-five cents per car; and out-inspection to fifty cents per 1,000 bushels.

These are the facts, and they interpret themselves. The fees charged for inspection come out of the shipper, and ultimately the producer. Every grain raiser whose surplus comes to Chicago is interested in this matter. The elevator interest has a very deep interest in it also, for this difference in the cost of inspection between Chicago and competing points is bound to decrease their receipts. As a business proposition extortionate inspection fees are very short-sighted. The department would do well to remember the fable of the goose that laid the golden egg. The experience to which attention has been called justifies and compels the conclusion that increase of rates is not the proper remedy for a depleted treasury.

Evidently a new broom, vigorously used, would be a very timely piece of office furniture for the grain department of the state government. Whether it be wielded by this man or that matters little, but Gov. Hamilton can not afford to neglect his present pressing duty as a genuine, business-like, and thorough-going civil-service reformer. Nothing should be allowed to stand in the way of this result.—*Inter-Ocean.*

## THE CHICAGO BOARD OF TRADE.

Once the Board of Trade was composed altogether of modest traders, but now here, as in almost every other department of American industrial life, a few big dealers, with their superior wealth and inferior morality, are gradually overcoming the crowd of little ones, and the board is practically made up of a few monopolizing capitalists and their numerous retinue of brokers. The law of the state against corners—corner being only an abbreviated term for the methods of these monopolists—remains a dead letter. It is impossible to enforce it against offenders so powerful. The rule of the board against corners has also been rescinded. The Board of Trade has substantially been surrendered by its members and the public to be a prize-ring for monetary pugilists.

There could be no greater mistake than to suppose this to be a matter that concerns the board alone or Chicago alone. If the usefulness of the Board of Trade is crippled by an unscrupulous abuse of its powers and facilities by a few rich men apparently willing to do anything to become more rich, the whole body of society suffers with this paralysis of one of its members. The institution that has been built up by the community for the purpose of making true prices for the food of the world cannot hold its place long after it is discovered that it is used only to manufacture false prices. It is a fact, though as little as possible has been said about it, that the entire trade of Chicago in lard has been almost suspended by the facts made public about adulteration. The effect on the business of the board of producing adulterated prices will be similar. If some means are not found of restoring the board to its true functions of exchanging real things, if some way is not provided by which the little trader may have some other useful work to do than merely to make a mouthful for the big trader, the board will be fatally injured.

No matter how many times the courts of this state may decide that the Board of Trade is a "voluntary association" and a private body, the fact will still be that it is the most important public institution in the State of Illinois. Making money seems to be so entirely a matter of private concern that the estimable gentlemen who have joined the board and frequent it solely for the purpose of making money, by no means realize that they are really public characters. In truth, the public itself does not yet recognize this. It knows that the prices of its food are made on the board, and it knows that they can be made nowhere else. But it has not yet risen to the recognition of the fact that the natural monopoly of the railroad in transportation and the board's acquired monopoly of dealing in food and fixing its prices, are open by precisely identical arguments to supervision. Secret meetings of "settling committees" to determine at what price the combatants shall settle who have been engaged in a struggle that has doubled the price of wheat, and secret meetings of "Directors" to look into the adulteration of lard, are an extension of Star-Chamber abuses that are endured only because exercised in a new field where the public has not yet thought out its rights.—*Chicago Tribune.*

## Special Notices.

**The Chicago Scale Co.** sell Scales of all kinds, also Portable Forges and Blacksmiths' Tools of all descriptions at about one-half usual prices. Buyers will save money by sending for their Price List.

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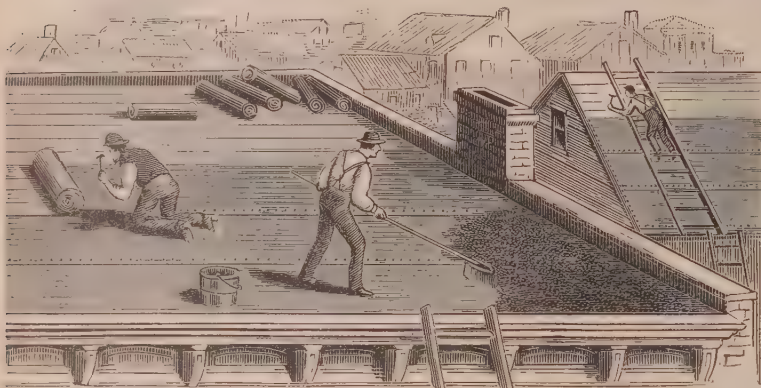
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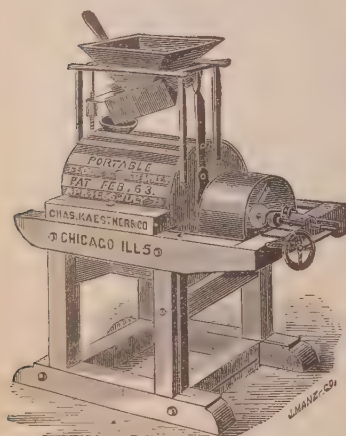
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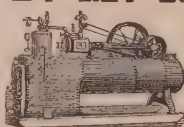
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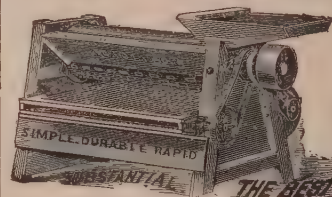
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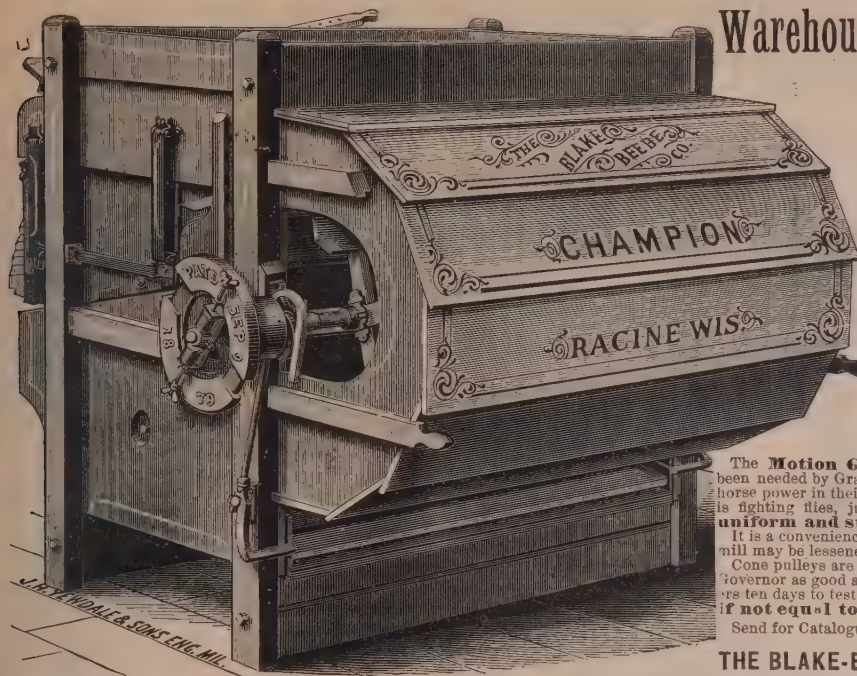
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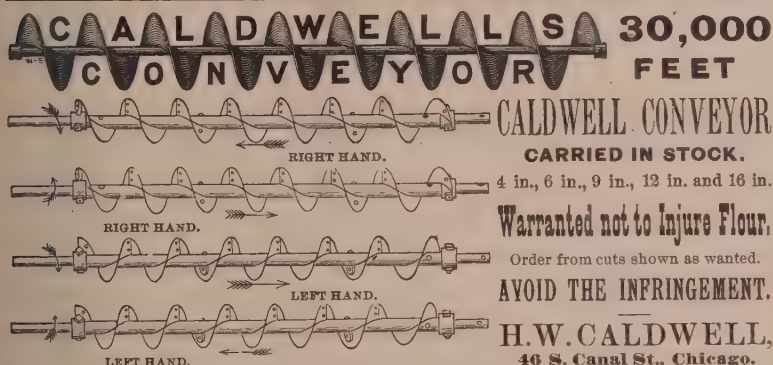
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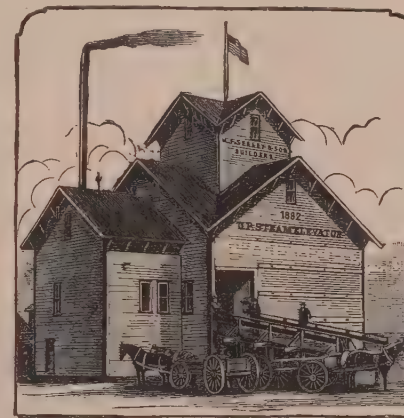
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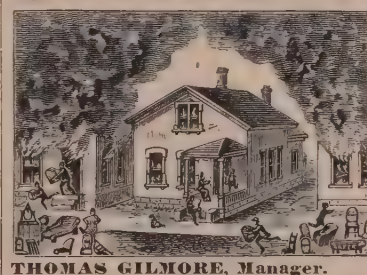
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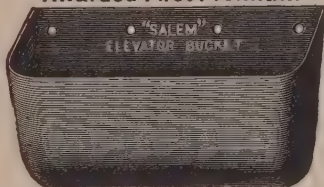
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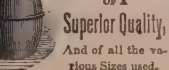
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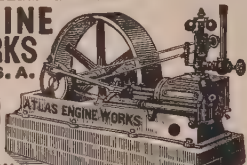
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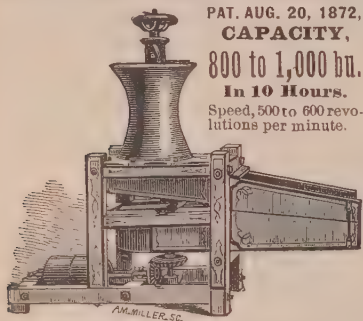
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Speed, 500 to 600 revolutions per minute.



Superior to all other shellers in simplicity, durability, and effectiveness in working. Runs with less power than any other sheller of equal capacity. Cleans the corn from the chaff, shells without breaking the cob, and will work with damp corn as well as dry. Can be adjusted to different size of corn ears without stopping the machine. Two styles made, geared, and not geared. Write for circulars and particulars.

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Superior to all Others for **SERVICE** and **ECONOMY.**

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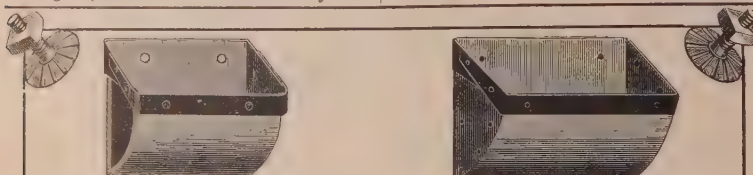
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Corn-Mills and Millstones,  
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**THE BEST IN THE WORLD**  
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Are of the most efficient style. We are also prepared to furnish

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Organized 1882.

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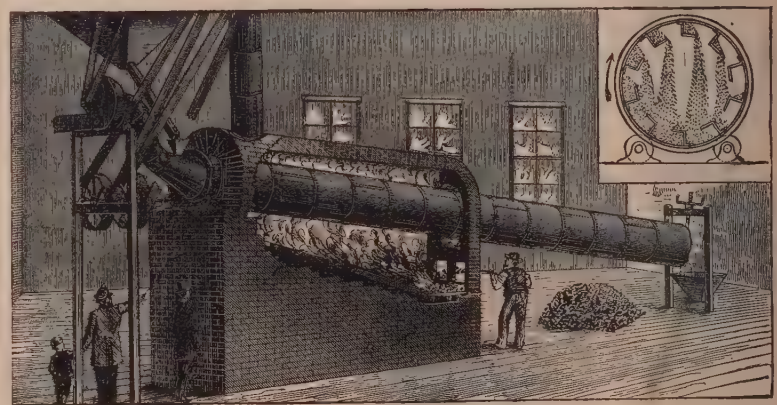
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**For Drying and Cooling, in one Operation,  
DAMP AND MUSTY GRAIN**

Of all Kinds. Particularly adapted to drying CORN for MEAL, and to the use of Elevators, for Cooling "Hot" Grain, and bringing new corn up to Grade. Machines for sale by

**S. E. WORRELL, Hannibal, Mo.**

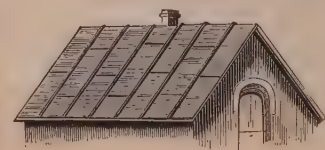
Read the following strong letter of recommendation. (The italics are just as they appear in the original.)

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S. E. WORRELL, Esq., Hannibal, Mo.:  
DEAR SIR:—We are pleased to state that the No. 2 Drier we recently constructed and erected from your plans and drawings, for one of the largest of our elevator firms, is doing admirable service. It is drying and cooling from 50 to 60 bushels of corn per hour—some of it in a very bad condition. We have had ample means of comparison, as at the same mills and elevator they have one of the best Steam Driers, and an Oven Shelf Drier or Kiln. They find that yours does more work and better work than either. Though previously suspicious of the new-comer, they pronounce it the best. We unhesitatingly recommend it as the most perfect Machine for the purpose, of which we have any knowledge.

Very respectfully,

ZELL & DANER, Baltimore Engineering Agency.



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The only double capped Corrugated Roofing, and the only one prepared by the manufacturers ready for laying.

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We Furnish Plans and Specifications for Grain Elevators of any desired capacity, with All Modern Improvements. Grain Elevator Supplies always on hand.

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With Legal Notes,

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MINNEAPOLIS, : : MINN.,

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For all Territory West of the Mississippi.

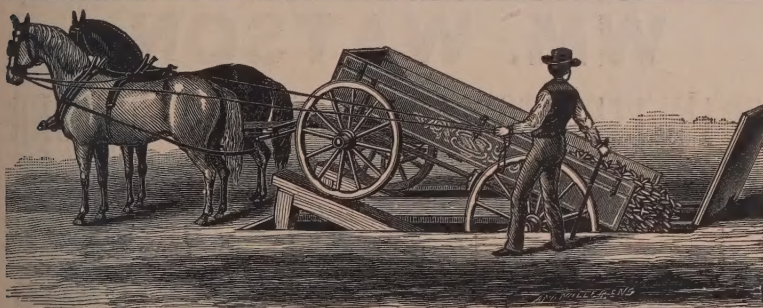
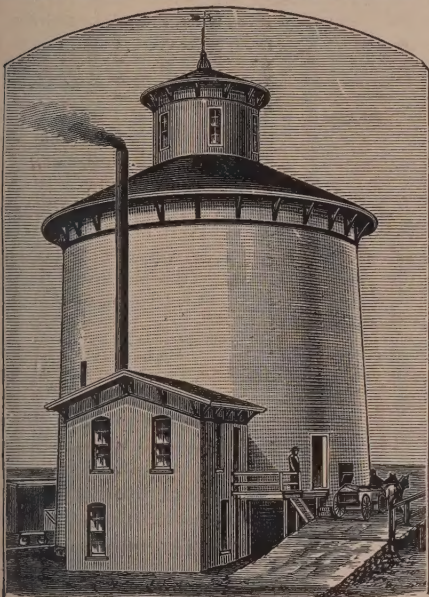
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We can refer intending Builders to any and all of them.

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And the

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The above cut is a fair representation of the Rail Dump in common use, on which we are collecting a royalty for past use, and licensing parties to continue to use and also put in New Dumps. Our patents on Rail Dumps fully cover this class of Dumps. Any one using Rail Dumps can readily decide by comparing his Dump with this cut, whether he infringes or not. We also control patents that cover Platform Dumps. Our prices are reasonable in settlements for past infringements, and for licenses to continue to use the Dumps. Prices given on application. See notice below.

## NOTICE.

### To Parties Using Grain Dumps.

Notice is hereby given that we have been retained to prosecute infringers of the following Letters Patent on Grain Dumps:

One granted to Noah Swickard, Oct. 13, 1868, No. 88,005. Reissued Dec. 20, 1870, No. 4,212, for Improvement in Wagon and Car Unloading Apparatus.

One granted to Samuel C. Kenaga, Oct. 20, 1868, No. 83,288, for Improved Dumping Platform.

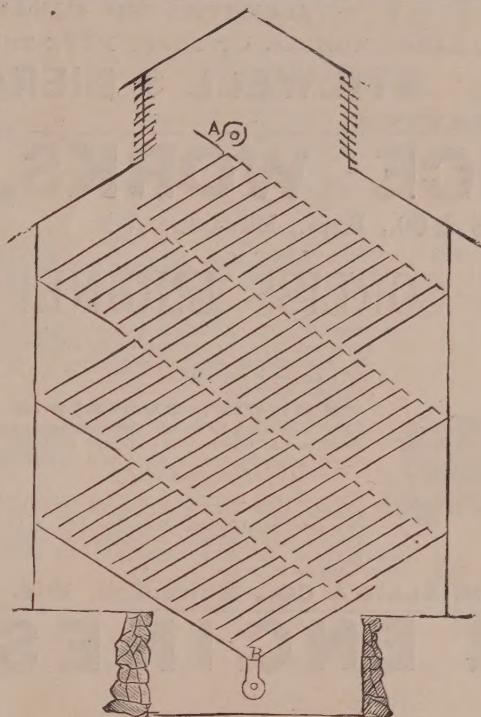
One granted to Benjamin Walton, Nov. 31, 1869, No. 97,252, for Improved Dumping Machine, and One granted to Wm. M. Hall, Sept. 6, 1870, No. 107,040, for improvement in Grain Dumps, and all persons or parties manufacturing or using Grain Dumps which infringe on any of the above described Patents must make settlement for all past infringements, and take license in accordance with the usual terms, if they desire to continue to manufacture or use the same, or legal steps will be taken to enforce said Patents against all infringers.

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For Cooling Heated Grain,

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Requires only 30 per cent. more room than common bulk storage.

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Little Difference in Cost.

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The Chicago Rawhide Mfg Co.,  
Manufacturers of

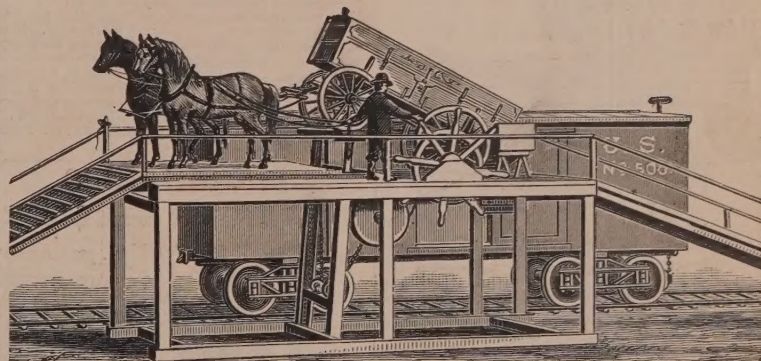
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—(Specially Adapted for)—  
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Lariats and Other Rawhide Goods of All Kinds.  
BY KRUEGER'S PATENT.

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(:)  
This Belting and Lace Leather Never Becomes Hard.

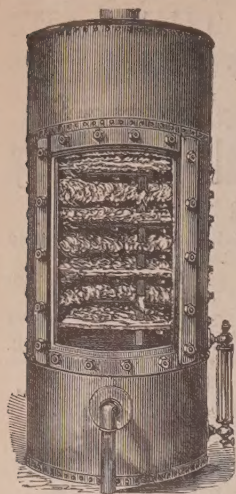
## THE HINMAN GRAIN DUMP.



The Hinman Dump possesses many advantages over other dumps that places its superiority beyond all question. The front end of the wagon is raised to any height desired, the rear end remaining stationary, necessitating full three feet less height of platform or driveway. There is no possibility of accident to horses or wagon. The wheel for elevating operates easily three or more dumps. Whilst especially designed for elevators, its superiority for portable and track use can be readily seen in the cut above. Elevator men can readily see that one-half the space is saved in dumping into the pit when used in elevator, or rail dump must be one-half higher for same pit room. When necessary a load of thirty or forty bushels of grain can be dumped around the mouth of the pit on top of driveway. Elevating wheel is ten feet in diameter. Cost of material, including driveway, \$40 to \$50. Spoke wheel and fixtures furnished at reasonable charges. Three of these dumps, in use since 1873, all worked from one wheel, can be seen at Elkhart Elevator, Elkhart City, Ill. A positive guarantee with every Dump, and ten to thirty days' trial must give satisfaction, or money refunded. Circulars and any further information cheerfully given by addressing

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Is the only Lime Extracting Heater that will Prevent Scale in Steam Boilers, removing all Impurities from the water before it enters the Boiler.

**THOROUGHLY TESTED. OVER 3,000 OF THEM IN DAILY USE!**

This cut is a facsimile of the appearance of a No. 5 Heater at work on ordinary Lime Water, when the door was removed after the Heater had been running two weeks.

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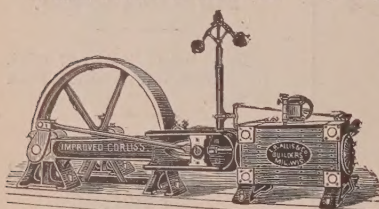
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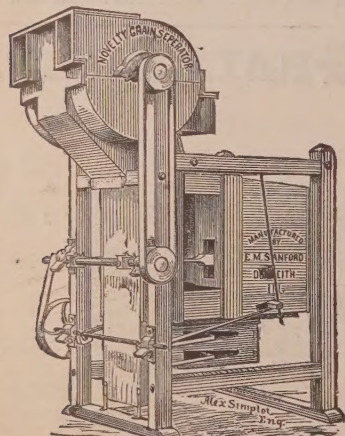
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## DUSTLESS GRAIN SEPARATOR!



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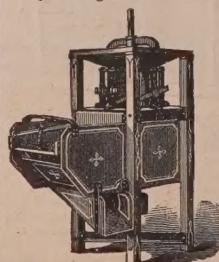
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M. DEAL & Co., Manufacturers California Grain Cleaning Machinery, Bucyrus, Ohio:

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Capacity, 75 to 100 bu. per hour.



REQUIRES LESS POWER than any other sheller. Will THOROUGHLY CLEAN from sand and dust. Easy access to all parts liable to clog. Well made. Cheap as any. The only Self-Adjusting Sheller in use that will shell

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IMPROVED

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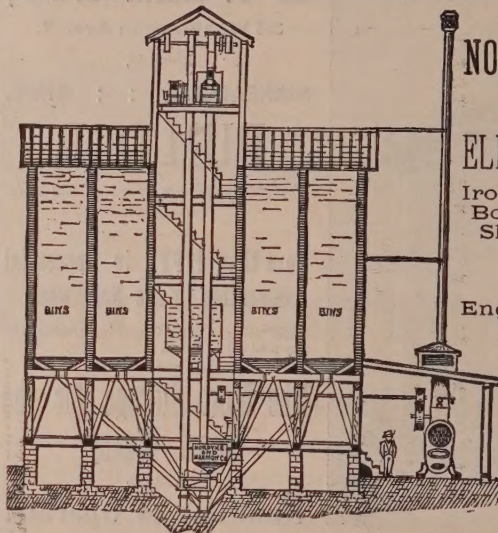
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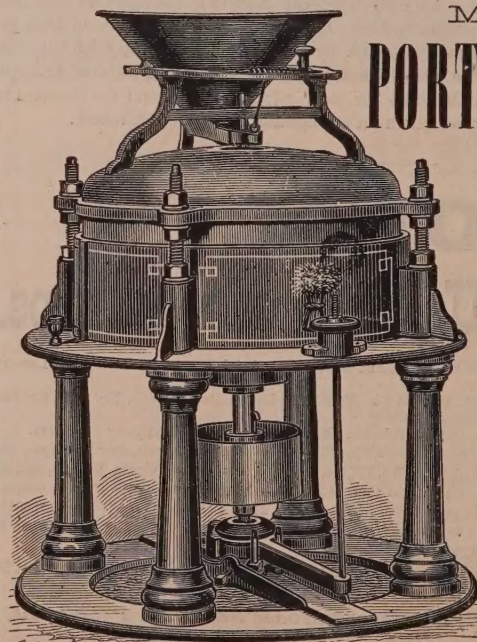
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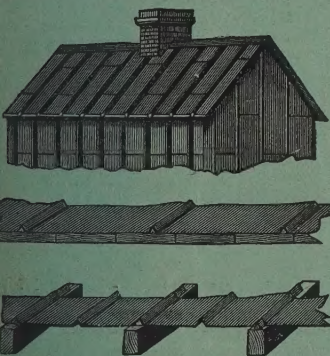
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Corrugated Iron Siding for Grain Elevators a Specialty.  
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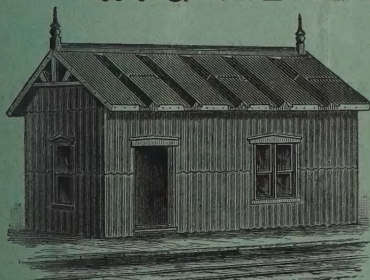
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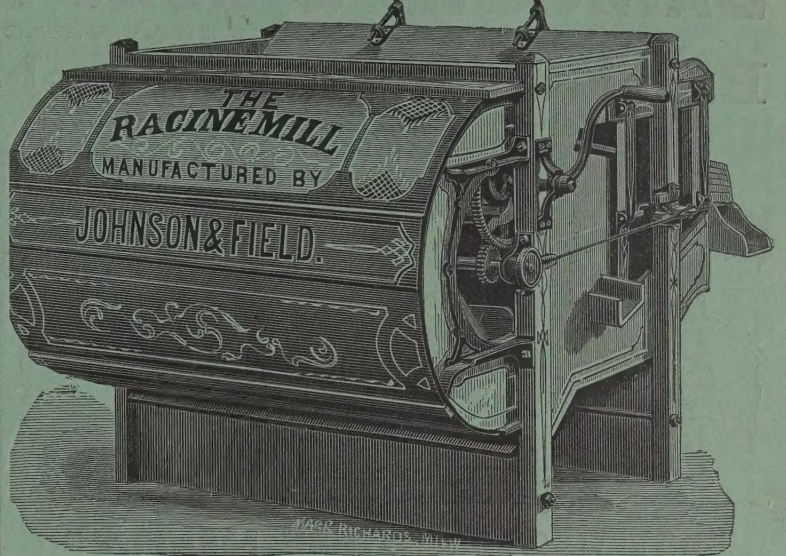


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THESE CELEBRATED SEPARATORS

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**SUPERIOR ATTACHMENTS, SCREENS AND SIEVES.**

They are made in two sizes for Millers, Warehouse and Elevator use.

They are **Warranted to Give Satisfaction.**

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ESTIMATES FURNISHED ON APPLICATION.

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Built under the Original patents until their expiration. Improvements since added: "STOP MOTION ON REGULATOR," prevents engine running away; "SELF-PACKING VALVE STEMS," (two patents) dispenses with four stuffing boxes; "RECESSED VALVE SEATS," prevent the wearing of shoulders on seats, and remedying a troublesome defect in other Corliss Engines; "HARRITT & HARRIS PISTON PACKING," (two patents); "DRIP-COLLECTING DEVICES," (one patent.) Also in "General Construction" and "Superior Workmanship."

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No other engine builder has authority to state that he can furnish this engine.

The only works where this engine can be obtained are at Providence, R. I., no outside parties being licensed.

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## Pulley Blocks

"ANCHOR BRAND."

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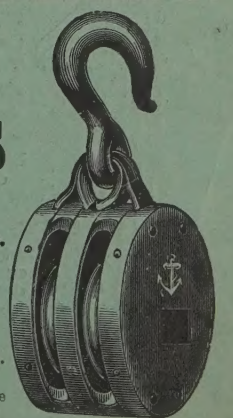
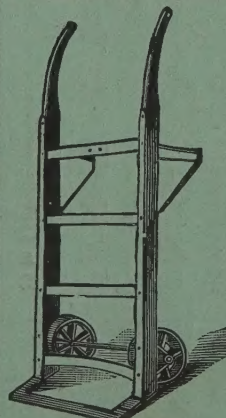
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WROUGHT IRON BLOCKS A SPECIALTY.

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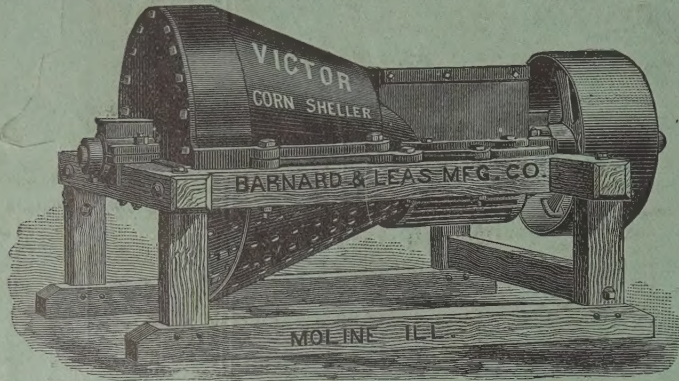




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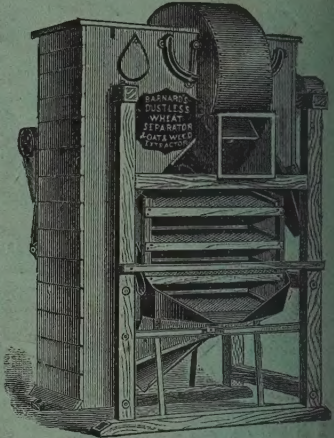
### BARNARD'S DUSTLESS ELEVATOR SEPARATOR,

Duplex Separator and Grader,

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Victor Lengthened Scourer.

The Latest and Best Machines Made for Warehouse Purposes.

SEND FOR CIRCULARS.



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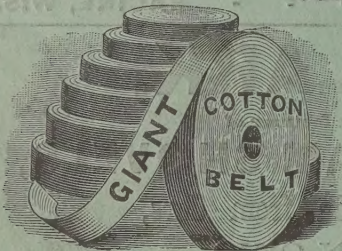
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MANUFACTURERS OF

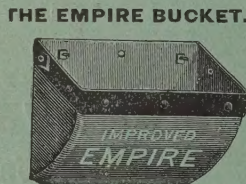
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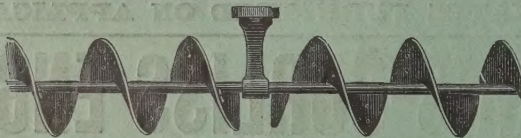
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BACKBONE STEEL CONVEYOR



THE EMPIRE BUCKET.

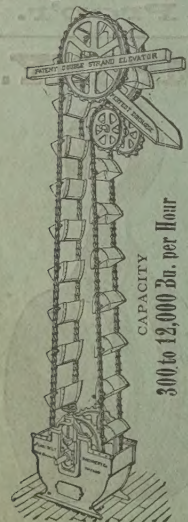


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Can be driven from the bottom.  
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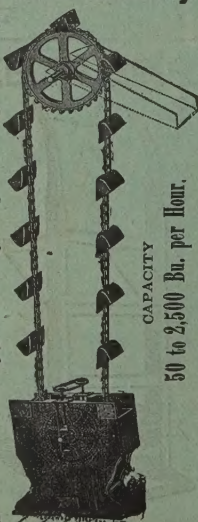
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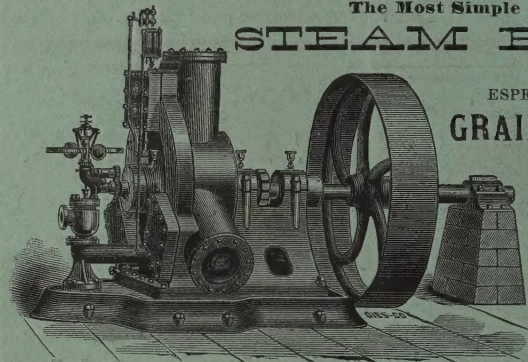
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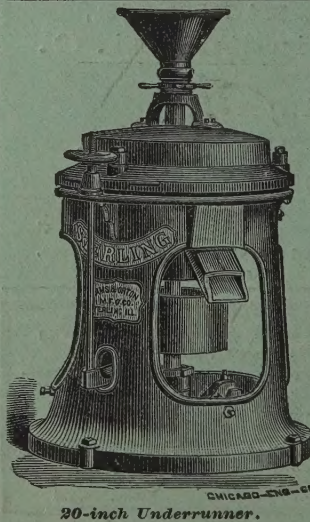
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